ARISTODRIVE 4-30 & 4-48HD
WIRE FEEDER

INSTRUCTION MANUAL

ESAB ITEM NO. 0558003275, AristoDrive 4-48
ESAB ITEM NO. 0558003276, AristoDrive 4-30

Revision B

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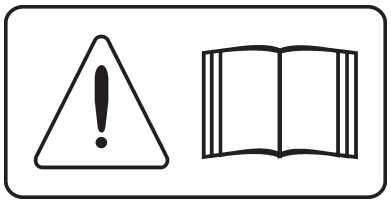

BE SURE THIS INFORMATION REACHES THE OPERATOR

These INSTRUCTIONS are for experienced operators. If you are not fully familiar with the principles of operation and safe practices for arc welding and cutting equipment, we urge you to read our booklet, "Precautions and Safe Practices for Arc Welding, Cutting, and Gouging," Form 52-529. Do NOT permit untrained persons to install, operate, or maintain this equipment. Do NOT attempt to install or operate this equipment until you have read and fully understand these instructions. If you do not fully understand these instructions, contact your supplier for further information. Be sure to read the Safety Precautions before installing or operating this equipment.

USER RESPONSIBILITY

This equipment will perform in conformity with the description thereof contained in this manual and accompanying labels and/or inserts when installed, operated, maintained and repaired in accordance with the instructions provided. This equipment must be checked periodically. Malfunctioning or poorly maintained equipment should not be used. Parts that are broken, missing, worn, distorted or contaminated should be replaced immediately. Should such repair or replacement become necessary, the manufacturer recommends that a telephone or written request for service advice be made to the Authorized Distributor from whom it was purchased.

This equipment or any of its parts should not be altered without the prior written approval of the manufacturer. The user of this equipment shall have the sole responsibility for any malfunction which results from improper use, faulty maintenance, damage, improper repair or alteration by anyone other than the manufacturer or a service facility designated by the manufacturer.

Copies of this manual can be obtained by any of the following;

Contacting your local ESAB supplier.

Downloading a copy from the ESAB web site at www.esabna.com

Sending a written request to

ESAB WELDING & CUTTING PRODUCTS
ATTN: LITERATURE DEPT.
411 S EBENEZER ROAD
FLORENCE SC 29501

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SAFETY PRECAUTIONS

WARNING: These Safety Precautions are for your protection. They summarize precautionary information from the references listed in Additional Safety Information section. Before performing any installation or operating procedures, be sure to read and follow the safety precautions listed below as well as all other manuals, material safety data sheets, labels, etc. Failure to observe Safety Precautions can result in injury or death.

PROTECT YOURSELF AND OTHERS -- Some welding, cutting, and gouging processes are noisy and require ear protection. The arc, like the sun, emits ultraviolet (UV) and other radiation and can injure skin and eyes. Hot metal can cause burns. Training in the proper use of the processes and equipment is essential to prevent accidents. Therefore:

1. Always wear safety glasses with side shields in any work area, even if welding helmets, face shields, and goggles are also required.
2. Use a face shield fitted with the correct filter and cover plates to protect your eyes, face, neck, and ears from sparks and rays of the arc when operating or observing operations. Warn bystanders not to watch the arc and not to expose themselves to the rays of the electric-arc or hot metal.
3. Wear flameproof gauntlet type gloves, heavy long-sleeve shirt, cuffless trousers, high-topped shoes, and a welding helmet or cap for hair protection, to protect against arc rays and hot sparks or hot metal. A flameproof apron may also be desirable as protection against radiated heat and sparks.
4. Hot sparks or metal can lodge in rolled up sleeves, trouser cuffs, or pockets. Sleeves and collars should be kept buttoned, and open pockets eliminated from the front of clothing
5. Protect other personnel from arc rays and hot sparks with a suitable non-flammable partition or curtains.
6. Use goggles over safety glasses when chipping slag or grinding. Chipped slag may be hot and can fly far. Bystanders should also wear goggles over safety glasses.

FIRES AND EXPLOSIONS -- Heat from flames and arcs can start fires. Hot slag or sparks can also cause fires and explosions. Therefore:

1. Remove all combustible materials well away from the work area or cover the materials with a protective non-flammable covering. Combustible materials include wood, cloth, sawdust, liquid and gas fuels, solvents, paints and coatings, paper, etc.
2. Hot sparks or hot metal can fall through cracks or crevices in floors or wall openings and cause a hidden smoldering fire or fires on the floor below. Make certain that such openings are protected from hot sparks and metal."
3. Do not weld, cut or perform other hot work until the workpiece has been completely cleaned so that there are no substances on the workpiece which might produce flammable or toxic vapors. Do not do hot work on closed containers. They may explode.
4. Have fire extinguishing equipment handy for instant use, such as a garden hose, water pail, sand bucket, or portable fire extinguisher. Be sure you are trained in its use.
5. Do not use equipment beyond its ratings. For example, overloaded welding cable can overheat and create a fire hazard.
6. After completing operations, inspect the work area to make certain there are no hot sparks or hot metal which could cause a later fire. Use fire watchers when necessary.
7. For additional information, refer to NFPA Standard 51B, "Fire Prevention in Use of Cutting and Welding Processes", available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

ELECTRICAL SHOCK -- Contact with live electrical parts and ground can cause severe injury or death. DO NOT use AC welding current in damp areas, if movement is confined, or if there is danger of falling.

1. Be sure the power source frame (chassis) is connected to the ground system of the input power.
2. Connect the workpiece to a good electrical ground.
3. Connect the work cable to the workpiece. A poor or missing connection can expose you or others to a fatal shock.
4. Use well-maintained equipment. Replace worn or damaged cables.
5. Keep everything dry, including clothing, work area, cables, torch/electrode holder, and power source.
6. Make sure that all parts of your body are insulated from work and from ground.
7. Do not stand directly on metal or the earth while working in tight quarters or a damp area; stand on dry boards or an insulating platform and wear rubber-soled shoes.
8. Put on dry, hole-free gloves before turning on the power.
9. Turn off the power before removing your gloves.
10. Refer to ANSI/ASC Standard Z49.1 (listed on next page) for specific grounding recommendations. Do not mistake the work lead for a ground cable.

ELECTRIC AND MAGNETIC FIELDS — May be dangerous. Electric current flowing through any conductor causes localized Electric and Magnetic Fields (EMF). Welding and cutting current creates EMF around welding cables and welding machines. Therefore:

1. Welders having pacemakers should consult their physician before welding. EMF may interfere with some pacemakers.
2. Exposure to EMF may have other health effects which are unknown.
3. Welders should use the following procedures to minimize exposure to EMF:
   A. Route the electrode and work cables together. Secure them with tape when possible.
   B. Never coil the torch or work cable around your body.
   C. Do not place your body between the torch and work cables. Route cables on the same side of your body.
   D. Connect the work cable to the workpiece as close as possible to the area being welded.
   E. Keep welding power source and cables as far away from your body as possible.

SAFETY PRECAUTIONS

FUMES AND GASES -- Fumes and gases, can cause discomfort or harm, particularly in confined spaces. Do not breathe fumes and gases. Shielding gases can cause asphyxiation. Therefore:

1. Always provide adequate ventilation in the work area by natural or mechanical means. Do not weld, cut, or gouge on materials such as galvanized steel, stainless steel, copper, zinc, lead, beryllium, or cadmium unless positive mechanical ventilation is provided. Do not breathe fumes from these materials.
2. Do not operate near degreasing and spraying operations. The heat or arc rays can react with chlorinated hydrocarbon vapors to form phosgene, a highly toxic gas, and other irritant gases.
3. If you develop momentary eye, nose, or throat irritation while operating, this is an indication that ventilation is not adequate. Stop work and take necessary steps to improve ventilation in the work area. Do not continue to operate if physical discomfort persists.
4. Refer to ANSI/ASC Standard Z49.1 (see listing below) for specific ventilation recommendations.
5. **WARNING: This product, when used for welding or cutting, produces fumes or gases which contain chemicals known to the State of California to cause birth defects and, in some cases, cancer. (California Health & Safety Code §25249.5 et seq.)**

CYLINDER HANDLING -- Cylinders, if mishandled, can rupture and violently release gas. Sudden rupture of cylinder, valve, or relief device can injure or kill. Therefore:

1. Use the proper gas for the process and use the proper pressure reducing regulator designed to operate from the compressed gas cylinder. Do not use adaptors. Maintain hoses and fittings in good condition. Follow manufacturer's operating instructions for mounting regulator to a compressed gas cylinder.
2. Always secure cylinders in an upright position by chain or strap to suitable hand trucks, undercarriages, benches, walls, post, or racks. Never secure cylinders to work tables or fixtures where they may become part of an electrical circuit.
3. When not in use, keep cylinder valves closed. Have valve protection cap in place if regulator is not connected. Secure and move cylinders by using suitable hand trucks. Avoid rough handling of cylinders.
4. Locate cylinders away from heat, sparks, and flames. Never strike an arc on a cylinder.
5. For additional information, refer to CGA Standard P-1, "Precautions for Safe Handling of Compressed Gases in Cylinders", which is available from Compressed Gas Association, 1235 Jefferson Davis Highway, Arlington, VA 22202.

EQUIPMENT MAINTENANCE -- Faulty or improperly maintained equipment can cause injury or death. Therefore:

1. Always have qualified personnel perform the installation, troubleshooting, and maintenance work. Do not perform any electrical work unless you are qualified to perform such work.
2. Before performing any maintenance work inside a power source, disconnect the power source from the incoming electrical power.
3. Maintain cables, grounding wire, connections, power cord, and power supply in safe working order. Do not operate any equipment in faulty condition.
4. Do not abuse any equipment or accessories. Keep equipment away from heat sources such as furnaces, wet conditions such as water puddles, oil or grease, corrosive atmospheres and inclement weather.
5. Keep all safety devices and cabinet covers in position and in good repair.
6. Use equipment only for its intended purpose. Do not modify it in any manner.

ADDITIONAL SAFETY INFORMATION -- For more information on safe practices for electric arc welding and cutting equipment, ask your supplier for a copy of "Precautions and Safe Practices for Arc Welding, Cutting and Gouging", Form 52-529.

The following publications, which are available from the American Welding Society, 550 N.W. LeJuene Road, Miami, FL 33126, are recommended to you:

1. ANSI/ASC Z49.1 - "Safety in Welding and Cutting"
2. AWS C5.1 - "Recommended Practices for Plasma Arc Welding"
3. AWS C5.2 - "Recommended Practices for Plasma Arc Cutting"
4. AWS C5.3 - "Recommended Practices for Air Carbon Arc Gouging and Cutting"
5. AWS C5.5 - "Recommended Practices for Gas Tungsten Arc Welding“
6. AWS C5.6 - "Recommended Practices for Gas Metal Arc Welding"“
7. AWS SP - "Safe Practices" - Reprint, Welding Handbook.
8. ANSI/AWS F4.1, "Recommended Safe Practices for Welding and Cutting of Containers That Have Held Hazardous Substances."

MEANING OF SYMBOLS - As used throughout this manual: Means Attention! Be Alert! Your safety is involved.

DANGER **Means immediate hazards which, if not avoided, will result in immediate, serious personal injury or loss of life.**

WARNING **Means potential hazards which could result in personal injury or loss of life.**

CAUTION **Means hazards which could result in minor personal injury.**

PRECAUCION DE SEGURIDAD

ADVERTENCIA: Estas Precauciones de Seguridad son para su protección. Ellas hacen resumen de información proveniente de las referencias listadas en la sección "Información Adicional Sobre La Seguridad". Antes de hacer cualquier instalación o procedimiento de operación , asegúrese de leer y seguir las precauciones de seguridad listadas a continuación así como también todo manual, hoja de datos de seguridad del material, calcomanias, etc. El no observar las Precauciones de Seguridad puede resultar en daño a la persona o muerte.

PROTEJASE USTED Y A LOS DEMAS-- Algunos procesos de soldadura, corte y ranurado son ruidosos y requiren protección para los oídos. El arco, como el sol , emite rayos ultravioleta (UV) y otras radiaciones que pueden dañar la piel y los ojos. El metal caliente causa quemaduras. EL entrenamiento en el uso propio de los equipos y sus procesos es esencial para prevenir accidentes. Por lo tanto:

1. Utilice gafas de seguridad con protección a los lados siempre que esté en el área de trabajo, aún cuando esté usando careta de soldar, protector para su cara u otro tipo de protección.
2. Use una careta que tenga el filtro correcto y lente para proteger sus ojos, cara, cuello, y oídos de las chispas y rayos del arco cuando se esté operando y observando las operaciones. Alerte a todas las personas cercanas de no mirar el arco y no exponerse a los rayos del arco eléctrico o el metal fundido.
3. Use guantes de cuero a prueba de fuego, camisa pesada de mangas largas, pantalón de ruedo liso, zapato alto al tobillo, y careta de soldar con capucha para el pelo, para proteger el cuerpo de los rayos y chispas calientes provenientes del metal fundido. En ocaciones un delantal a prueba de fuego es necesario para protegerse del calor radiado y las chispas.
4. Chispas y partículas de metal caliente puede alojarse en las mangas enrolladas de la camisa , el ruedo del pantalón o los bolsillos. Mangas y cuellos deberán mantenerse abotonados, bolsillos al frente de la camisa deberán ser cerrados o eliminados.
5. Proteja a otras personas de los rayos del arco y chispas calientes con una cortina adecuada no-flamable como división.
6. Use careta protectora además de sus gafas de seguridad cuando esté removiendo escoria o puliendo. La escoria puede estar caliente y desprenderse con velocidad. Personas cercanas deberán usar gafas de seguridad y careta protectora.

FUEGO Y EXPLOSIONES -- El calor de las flamas y el arco pueden ocacionar fuegos. Escoria caliente y las chispas pueden causar fuegos y explosiones. Por lo tanto:

1. Remueva todo material combustible lejos del área de trabajo o cubra los materiales con una cobija a prueba de fuego. Materiales combustibles incluyen madera, ropa, líquidos y gases flamables, solventes, pinturas, papel, etc.
2. Chispas y partículas de metal pueden introducirse en las grietas y agujeros de pisos y paredes causando fuegos escondidos en otros niveles o espacios. Asegúrese de que toda grieta y agujero esté cubierto para proteger lugares adyacentes contra fuegos.
3. No corte, suelde o haga cualquier otro trabajo relacionado hasta que la pieza de trabajo esté totalmente limpia y libre de substancias que puedan producir gases inflamables o vapores tóxicos. No trabaje dentro o fuera de contenedores o tanques cerrados. Estos pueden explotar si contienen vapores inflamables.
4. Tenga siempre a la mano equipo extintor de fuego para uso instantáneo, como por ejemplo una manguera con agua, cubeta con agua, cubeta con arena, o extintor portátil. Asegúrese que usted esta entrenado para su uso.
5. No use el equipo fuera de su rango de operación. Por ejemplo, el calor causado por cable sobrecarga en los cables de soldar pueden ocasionar un fuego.
6. Después de termirar la operación del equipo, inspeccione el área de trabajo para cerciorarse de que las chispas o metal caliente ocasionen un fuego más tarde. Tenga personal asignado para vigilar si es necesario.
7. Para información adicional , haga referencia a la publicación NFPA Standard 51B, "Fire Prevention in Use of Cutting and Welding Processes", disponible a través de la National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

CHOQUE ELECTRICO -- El contacto con las partes eléctricas energizadas y tierra puede causar daño severo o muerte. NO use soldadura de corriente alterna (AC) en áreas húmedas, de movimiento confinado en lugares estrechos o si hay posibilidad de caer al suelo.

1. Asegúrese de que el chasis de la fuente de poder esté conectado a tierra através del sistema de electricidad primario.
2. Conecte la pieza de trabajo a un buen sistema de tierra física.
3. Conecte el cable de retorno a la pieza de trabajo. Cables y conductores expuestos o con malas conexiones pueden exponer al operador u otras personas a un choque eléctrico fatal.
4. Use el equipo solamente si está en buenas condiciones. Reemplaze cables rotos, dañados o con conductores expuestos.
5. Mantenga todo seco, incluyendo su ropa, el área de trabajo, los cables, antorchas, pinza del electrodo, y la fuente de poder.
6. Asegúrese que todas las partes de su cuerpo están insuladas de ambos, la pieza de trabajo y tierra.
7. No se pare directamente sobre metal o tierra mientras trabaja en lugares estrechos o áreas húmedas; trabaje sobre un pedazo de madera seco o una plataforma insulada y use zapatos con suela de goma.
8. Use guantes secos y sin agujeros antes de energizar el equipo.
9. Apage el equipo antes de quitarse sus guantes.
10. Use como referencia la publicación ANSI/ASC Standard Z49.1 (listado en la próxima página) para recomendaciones específicas de como conectar el equipo a tierra. No confunda el cable de soldar a la pieza de trabajo con el cable a tierra.

CAMPOS ELECTRICOS Y MAGNETICOS - Son peligrosos.

La corriente eléctrica fluye através de cualquier conductor causando a nivel local Campos Eléctricos y Magnéticos (EMF). Las corrientes en el área de corte y soldadura, crean EMF alrrededor de los cables de soldar y las maquinas. Por lo tanto:

1. Soldadores u Operadores que use marca-pasos para el corazón deberán consultar a su médico antes de soldar. El Campo Electromagnético (EMF) puede interferir con algunos marca-pasos.
2. Exponerse a campos electromagnéticos (EMF) puede causar otros efectos de salud aún desconocidos.
3. Los soldadores deberán usar los siguientes procedimientos para minimizar exponerse al EMF:
   A. Mantenga el electrodo y el cable a la pieza de trabajo juntos, hasta llegar a la pieza que usted quiere soldar. Asegúrelos uno junto al otro con cinta adhesiva cuando sea posible.
   B. Nunca envuelva los cables de soldar alrededor de su cuerpo.
   C. Nunca ubique su cuerpo entre la antorcha y el cable, a la pieza de trabajo. Mantega los cables a un sólo lado de su cuerpo.
   D. Conecte el cable de trabajo a la pieza de trabajo lo más cercano posible al área de la soldadura.
   E. Mantenga la fuente de poder y los cables de soldar lo más lejos posible de su cuerpo.

HUMO Y GASES -- El humo y los gases, pueden causar malestar o daño, particularmente en espacios sin ventilación. No inhale el humo o gases. El gas de protección puede causar falta de oxígeno.

Por lo tanto:

1. Siempre provea ventilación adecuada en el área de trabajo por medio natural o mecánico. No solde, corte, o ranure materiales con hierro galvanizado, acero inoxidable, cobre, zinc, plomo, berílio, o cadmio a menos que provea ventilación mecánica positiva . No respire los gases producidos por estos materiales.
2. No opere cerca de lugares donde se aplique substancias químicas en aerosol. El calor de los rayos del arco pueden reaccionar con los vapores de hidrocarburo clorinado para formar un fosfógeno, o gas tóxico, y otros irritant es.
3. Si momentáneamente desarrolla inrritación de ojos, nariz o garganta mientras est á operando, es indicación de que la ventilación no es apropiada. Pare de trabajar y tome las medidas necesarias para mejorar la ventilación en el área de trabajo. No continúe operando si el malestar físico persiste.
4. Haga referencia a la publicación ANSI/ASC Standard Z49.1 (Vea la lista a continuación) para recomendaciones específicas en la ventilación.
5. **ADVERTENCIA-- Este producto cuando se utiliza para soldaduras o cortes, produce humos o gases, los cuales contienen químicos conocidos por el Estado de California de causar defectos en el nacimiento, o en algunos casos, Cancer. (California Health & Safety Code §25249.5 et seq.)**

MANEJO DE CILINDROS-- Los cilindros, si no son manejados correctamente, pueden romperse y liberar violentamente gases. Rotura repentina del cilindro, válvula, o válvula de escape puede causar daño o muerte. Por lo tanto:

1. Utilize el gas apropiado para el proceso y utilize un regulador diseñado para operar y reducir la presión del cilindro de gas . No utilice adaptadores. Mantenga las mangueras y las conexiones en buenas condiciones. Observe las instrucciones de operación del manufacturero para montar el regulador en el cilindro de gas comprimido.
2. Asegure siempre los cilindros en posición vertical y amárrelos con una correa o cadena adecuada para asegurar el cilindro al carro, transportes, tablilleros, paredes, postes, o armazón. Nunca asegure los cilindros a la mesa de trabajo o las piezas que son parte del circuito de soldadura . Este puede ser parte del circuito elélectrico.
3. Cuando el cilindro no está en uso, mantenga la válvula del cilindro cerrada. Ponga el capote de protección sobre la válvula si el regulador no está conectado. Asegure y mueva los cilindros utilizando un carro o transporte adecuado. Evite el manejo brusco de los

MANTENIMIENTO DEL EQUIPO -- Equipo defectuoso o mal mantenido puede causar daño o muerte. Por lo tanto:

1. Siempre tenga personal cualificado para efectuar l a instalación, diagnóstico, y mantenimiento del equipo. No ejecute ningún trabajo eléctrico a menos que usted esté cualificado para hacer el trabajo.
2. Antes de dar mantenimiento en el interior de la fuente de poder, desconecte la fuente de poder del suministro de electricidad primaria.
3. Mantenga los cables, cable a tierra, conexciones, cable primario, y cualquier otra fuente de poder en buen estado operacional. No opere ningún equipo en malas condiciones.
4. No abuse del equipo y sus accesorios. Mantenga el equipo lejos de cosas que generen calor como hornos, también lugares húmedos como charcos de agua , aceite o grasa, atmósferas corrosivas y las inclemencias del tiempo.
5. Mantenga todos los artículos de seguridad y coverturas del equipo en su posición y en buenas condiciones.
6. Use el equipo sólo para el propósito que fue diseñado. No modifique el equipo en ninguna manera.

INFORMACION ADICIONAL DE SEGURIDAD -- Para más información sobre las prácticas de seguridad de los equipos de arco eléctrico para soldar y cortar, pregunte a su suplidor por una copia de "Precautions and Safe Practices for Arc Welding, Cutting and Gouging-Form 52-529.

Las siguientes publicaciones, disponibles através de la American Welding Society, 550 N.W. LeJuene Road, Miami, FL 33126, son recomendadas para usted:

1. ANSI/ASC Z49.1 - "Safety in Welding and Cutting"
2. AWS C5.1 - "Recommended Practices for Plasma Arc Welding"
3. AWS C5.2 - "Recommended Practices for Plasma Arc Cutting"
4. AWS C5.3 - "Recommended Practices for Air Carbon Arc Gouging and Cutting"
5. AWS C5.5 - "Recommended Practices for Gas Tungsten Arc Welding“
6. AWS C5.6 - "Recommended Practices for Gas Metal Arc Welding"“
7. AWS SP - "Safe Practices" - Reprint, Welding Handbook.
8. ANSI/AWS F4.1, "Recommended Safe Practices for Welding and Cutting of Containers That Have Held Hazardous Substances."

SIGNIFICADO DE LOS SIMBOLOS -- Según usted avanza en la lectura de este folleto: Los Símbolos Significan ¡Atención! ¡Esté Alerta! Se trata de su seguridad.

PELIGRO **Significa riesgo inmediato que, de no ser evadido, puede resultar inmediatamente en serio daño personal o la muerte.**

ADVERTENCIA **Significa el riesgo de un peligro potencial que puede resultar en serio daño personal o la muerte.**

CUIDADO **Significa el posible riesgo que puede resultar en menores daños a la persona.**

PRÉCAUTIONS DE SÉCURITÉ

AVERTISSEMENT: Ces règles de sécurité ont pour objet d' assurer votre protection. Veillez à lire et à observer les précautions énoncées ci-dessous avant de monter l' équipement ou de commercer à l'utiliser. Tout défaut d'observation de ces précautions risque d'entraîner des blessures graves ou mortelles.

1. PROTECTION INDIVIDUELLE-- Les brûlures de la peau et des yeux dues au rayonnement de l'arc électrique ou du métal incandescent, lors du soudage au plasma ou à l'électrode ou lors du gougeage à l'arc, peuvent s'avérer plus graves que celles résultant d'une exposition prolongée au soleil. Aussi convient-il d'observer les précautions suivantes:

a. Portez un écran facial adéquat muni des plaques protectrices et des verres filtrants appropriés afin de vous protéger les yeux, le visage, le cou et les oreilles des étincelles et du rayonnement de l'arc électrique lorsque vous effectuez des soudures ou des coupes ou lorsque vous en observez l'exécution.

AVERTISSEZ les personnes se trouvant à proximité de façon à ce qu'elles ne regardent pas l'arc et à ce qu'elles ne s'exposent pas à son rayonnement, ni à celui du métal incandescent.

b. Portez des gants ignifugés à crispins, une tunique épaisse à manches longues, des pantalons sans rebord, des chaussures à embout d'acier et un casque de soudage ou une calotte de protection, afin d'éviter d'exposer la peau au rayonnement de l'arc électrique ou du métal incandescent. Il est également souhaitable d'utiliser un tablier ininflammable de façon à se protéger des étincelles et du rayonnement thermique.

c. Les étincelles ou les projections de métal incandescent risquent de se loger dans des manches retroussées, des bords relevés de pantalons ou dans des poches. Aussi convient-il de garder boutonnés le col et les manches et de porter des vêtements sans poches à l'avant.

d. Protégez des étincelles et du rayonnement de l'arc électrique les autres personnes travaillant à proximité à l'aide d'un écran ininflammable adéquat.

e. Ne jamais omettre de porter des lunettes de sécurité lorsque vous vous trouvez dans un secteur où l'on effectue des opérations de soudage ou de coupage à l'arc. Utilisez des lunettes de sécurité à écrans ou verres latéraux pour piquer ou meûler le laitier. Les piquetures incandescentes de laitier peuvent être projetées à des distances considérables. Les personnes se trouvant à proximité doivent également porter des lunettes de protection.

f. Le gougeage à l'arc et le soudage à l'arc au plasma produisent un niveau de bruit extrêmement élevé (de 100 à 114 dB) et exigent par conséquent l'emploi de dispositifs appropriés de protection auditive.

2 PRÉVENTION DES INCENDES-- Les projections de laitier incandescent ou d'étincelles peuvent provoquer de graves incendies au contact de matériaux combustibles solides, liquides ou gazeux. Aussi faut-il observer les précautions suivantes:

a. Éloigner suffisamment tous les matériaux combustibles du secteur où l'on exécute des soudures ou des coupes à l'arc, à moins de les recouvrir complètement d'une bâche non-inflammable. Ce type de matériaux comprend notamment le bois, les vêtements, la sciure, l'essence, le kérosène, les peintures, les solvants, le gaz naturel, l'acétylène, le propane et autres substances combustibles semblables.

b. Les étincelles ou les projections de métal incandescent peuvent tomber dans des fissures du plancher ou dans des ouvertures des murs et y déclencher une ignition lente cachée. Veiller à protéger ces ouvertures des étincelles et des projections de métal.

c. N'exécutez pas de soudures, de coupes, d'opérations de gougeage ou autres travaux à chaud à la surface de barils, bidons, réservoirs ou autres contenants usagés, avant de les avoir nettoyés de toute trace de substance susceptible de produire des vapeurs inflammables ou toxiques.

d. En vue d'assurer la prévention des incendies, il convient de disposer d'un matériel d'extinction prêt à servir immédiatement, tel qu'un tuyau d'arrosage, un seau à eau, un seau de sable ou un extincteur portatif.

e. Une fois le travail à l'arc terminé, inspectez le secteur de façon à vous assurer qu'aucune étincelle ou projection de métal incandescent ne risque de provoquer ultérieurement un feu.

3. CHOC ÉLECTRIQUE-- Le gougeage à l'arc et à l'arc au plasma exige l'emploi de tensions à vide relativement importantes; or, celles-ci risquent de causer des dommages corporels graves et même mortels en cas d'utilisation inadéquate. La gravité du choc électrique reçu dépend du chemin suivi par le courant à travers le corps humain et de son intensité.

a. Ne laissez jamais de surfaces métalliques sous tension venir au contact direct de la peau ou de vêtements humides. Veillez à porter des gants bien secs.

b. Si vous devez effectuer un travail sur une surface métallique ou dans un secteur humide, veillez à assu-rer votre isolation corporelle en portant des gants secs et des chaussures à semelles de caoutchouc et en vous tenant sur une planche ou une plate-forme sèche.

c. Mettez toujours à la terre le poste de soudage/coupage en le reliant par un câble à une bonne prise de terre.

d. N'utilisez jamais de câbles usés ou endommagés. Ne surchargez jamais le câble. Utilisez toujours un équipement correctement entretenu.

e. Mettez l'équipement hors tension lorsqu'il n'est pas en service. une mise à la masse accidentelle peut en effet provoquer une surchauffe de l'équipement et un danger d'incendie. Ne pas enrouler ou passer le câble autour d'une partie quelconque du corps.

f. Vérifiez si le câble de masse est bien relié à la pièce en un point aussi proche que possible de la zone de travail. Le branchement des câbles de masse à l'ossature du bâtiment ou en un point éloigné de la zone de travail augmente en effet le risque de passage d'un courant de sortie par des chaînes de

PRÉCAUTIONS DE SÉCURITÉ

AVERTISSEMENT: Ces règles de sécurité ont pour objet d' assurer votre protection. Veillez à lire et à observer les précautions énoncées ci-dessous avant de monter l' équipement ou de commercer à l'utiliser. Tout défaut d'observation de ces précautions risque d'entraîner des blessures graves ou mortelles.

1. PROTECTION INDIVIDUELLE-- Les brûlures de la peau et des yeux dues au rayonnement de l'arc électrique ou du métal incandescent, lors du soudage au plasma ou à l'électrode ou lors du gougeage à l'arc, peuvent s'avérer plus graves que celles résultant d'une exposition prolongée au soleil. Aussi convient-il d'observer les précautions suivantes:

a. Portez un écran facial adéquat muni des plaques protectrices et des verres filtrants appropriés afin de vous protéger les yeux, le visage, le cou et les oreilles des étincelles et du rayonnement de l'arc électrique lorsque vous effectuez des soudures ou des coupes ou lorsque vous en observez l'exécution.

AVERTISSEZ les personnes se trouvant à proximité de façon à ce qu'elles ne regardent pas l'arc et à ce qu'elles ne s'exposent pas à son rayonnement, ni à celui du métal incandescent.

b. Portez des gants ignifugés à crispins, une tunique épaisse à manches longues, des pantalons sans rebord, des chaussures à embout d'acier et un casque de soudage ou une calotte de protection, afin d'éviter d'exposer la peau au rayonnement de l'arc électrique ou du métal incandescent. Il est également souhaitable d'utiliser un tablier ininflammable de façon à se protéger des étincelles et du rayonnement thermique.

c. Les étincelles ou les projections de métal incandescent risquent de se loger dans des manches retroussées, des bords relevés de pantalons ou dans des poches. Aussi convient-il de garder boutonnés le col et les manches et de porter des vêtements sans poches à l'avant.

d. Protégez des étincelles et du rayonnement de l'arc électrique les autres personnes travaillant à proximité à l'aide d'un écran ininflammable adéquat.

e. Ne jamais omettre de porter des lunettes de sécurité lorsque vous vous trouvez dans un secteur où l'on effectue des opérations de soudage ou de coupage à l'arc. Utilisez des lunettes de sécurité à écrans ou verres latéraux pour piquer ou meûler le laitier. Les piquetures incandescentes de laitier peuvent être projetées à des distances considérables. Les personnes se trouvant à proximité doivent également porter des lunettes de protection.

f. Le gougeage à l'arc et le soudage à l'arc au plasma produisent un niveau de bruit extrêmement élevé (de 100 à 114 dB) et exigent par conséquent l'emploi de dispositifs appropriés de protection auditive.

2 PRÉVENTION DES INCENDES-- Les projections de laitier incandescent ou d'étincelles peuvent provoquer de graves incendies au contact de matériaux combustibles solides, liquides ou gazeux. Aussi faut-il observer les précautions suivantes:

a. Éloigner suffisamment tous les matériaux combustibles du secteur où l'on exécute des soudures ou des coupes à l'arc, à moins de les recouvrir complètement d'une bâche non-inflammable. Ce type de matériaux comprend notamment le bois, les vêtements, la sciure, l'essence, le kérosène, les peintures, les solvants, le gaz naturel, l'acétylène, le propane et autres substances combustibles semblables.

b. Les étincelles ou les projections de métal incandescent peuvent tomber dans des fissures du plancher ou dans des ouvertures des murs et y déclencher une ignition lente cachée. Veiller à protéger ces ouvertures des étincelles et des projections de métal.

c. N'exécutez pas de soudures, de coupes, d'opérations de gougeage ou autres travaux à chaud à la surface de barils, bidons, réservoirs ou autres contenants usagés, avant de les avoir nettoyés de toute trace de substance susceptible de produire des vapeurs inflammables ou toxiques.

d. En vue d'assurer la prévention des incendies, il convient de disposer d'un matériel d'extinction prêt à servir immédiatement, tel qu'un tuyau d'arrosage, un seau à eau, un seau de sable ou un extincteur portatif.

e. Une fois le travail à l'arc terminé, inspectez le secteur de façon à vous assurer qu'aucune étincelle ou projection de métal incandescent ne risque de provoquer ultérieurement un feu.

3. CHOC ÉLECTRIQUE-- Le gougeage à l'arc et à l'arc au plasma exige l'emploi de tensions à vide relativement importantes; or, celles-ci risquent de causer des dommages corporels graves et même mortels en cas d'utilisation inadéquate. La gravité du choc électrique reçu dépend du chemin suivi par le courant à travers le corps humain et de son intensité.

a. Ne laissez jamais de surfaces métalliques sous tension venir au contact direct de la peau ou de vêtements humides. Veillez à porter des gants bien secs.

b. Si vous devez effectuer un travail sur une surface métallique ou dans un secteur humide, veillez à assu-rer votre isolation corporelle en portant des gants secs et des chaussures à semelles de caoutchouc et en vous tenant sur une planche ou une plate-forme sèche.

c. Mettez toujours à la terre le poste de soudage/coupage en le reliant par un câble à une bonne prise de terre.

d. N'utilisez jamais de câbles usés ou endommagés. Ne surchargez jamais le câble. Utilisez toujours un équipement correctement entretenu.

e. Mettez l'équipement hors tension lorsqu'il n'est pas en service. une mise à la masse accidentelle peut en effet provoquer une surchauffe de l'équipement et un danger d'incendie. Ne pas enrouler ou passer le câble autour d'une partie quelconque du corps.

f. Vérifiez si le câble de masse est bien relié à la pièce en un point aussi proche que possible de la zone de travail. Le branchement des câbles de masse à l'ossature du bâtiment ou en un point éloigné de la zone de travail augmente en effet le risque de passage d'un courant de sortie par des chaînes de

AristoDrive 4™-Wire Feeders

- *Modular MMC panel for easy function and feature upgradability (MMC=Man/Machine Communications) .*
- *Use with AristoPower-460 Power Source*
- *Heavy duty compact wire feed motor.*
- *Quick release 4-roll drive assembly; no read-justment of pressure required when rethreading wire.*
- *Quick release "No Tools" feed roll system.*
- *Driven upper and lower feed rolls for positive feed force and maximum wire grip.*
- *Presettable arc voltage and wire speed*
- *All control circuits incorporated on one solid-state printed circuit board, mounted for easy access and removal.*
- *Slow run-in button sets the wire feed speed to 1/2 the preset until the arc is struck for smoother arc starting.*
- *Jog button for wire inching without energizing the power source contactor.*
- *Anti-stick wire burnback control for precise adjustment of amount of wire burnback after wire feed stops, to eliminate freezing of wire in weld pool.*
- *Low voltage circuit (12V) for gun trigger switch, to assure operator safety.*
- *NAS (#4 Tweco) gun adapter factory installed.*
- *"Sure Start" wire conditioning to eliminate wire balling and ensure good arc starting*

3 YEAR WARRANTY

AristoDrive 4-30

AristoDrive 4-48

Specifications:

AristoDrive 4-30

Wire Feed Range:
- Speed Range ..... 30-999 in/min (.8 - 25 m/min)

Wire Sizes:
- Hard (V-Groove) ..... .023 - 1/16 in.(.6-1.6mm)
- Cored (Knurled) ..... .035 - 5/64 in.(.9-2.0mm)
- Soft (U-Groove) ..... .035 - 1/16 in.(.9-1.6mm)

Input power ..... 42 Vac / 60hz.
Drive Roll Diameter 30mm
Dimensions:
- Length ..... 22.5 in.(572mm)
- Width ..... 10.5 in.(268mm)
- Height ..... 16.5 in.(419mm)
- Weight. ..... 45-lbs.(20.5Kg)

AristoDrive 4-48

Wire Feed Range:
- Speed Range ..... 30-800 in/min (.8 - 20.5 m/min)

Wire Sizes:
- Hard (V-Groove) .... .035 - 1/16 in.(.9 - 1.6mm)
- Tubular (Knurled) .. .035 - 1/8 in. (.9 - 3.2mm)
- Soft (U-Groove) ..... .045 - 3/32 in.(.9 - 2.4mm)

Input Power ..... 42 Vac / 60hz.
Drive Roll Diameter 48mm
Dimensions:
- Length ..... 23 in.(584mm)
- Width ..... 14.5 in.(368mm)
- Height ..... 16.5 in.(419mm)
- Weight ..... 53 lbs.(24Kg)

Built a Custom AristoPower Welding System

AristoPower ™ Power Source	AristoDrive 4™ Wire Feeder	Connection Cable	Gunmaster 400 NAS Connection	Options & Accessories
AristoPower-460 0558002668	AristoDrive 4-30 * 0558003276	6ft. (2m) 0456527880	12 ft. x .035-.045 0558001656	Complete Your Custom System by Ordering Components from the Options & Accessories List on the following page
	AristoDrive 4-48 * 0558003275	26ft. (8m) 0456527881	15 ft. x .035-.045 0558001659	
	AristoDrive 4-48 * Boom System 0558003700	52ft. (16m) 0456527882	12 ft. x .052-1/16 0558001657	
	Balance Boom**	82ft. (25m) 0456527883	15 ft. x .052-1/16 0558001660	
	Balance Boom 12ft. 0558003442	114ft. (35m) 0456527884		
	Balance Boom 16ft. 0558003365			

* Includes MA-6 MMC

** See Boom Sales Sheets for complete information

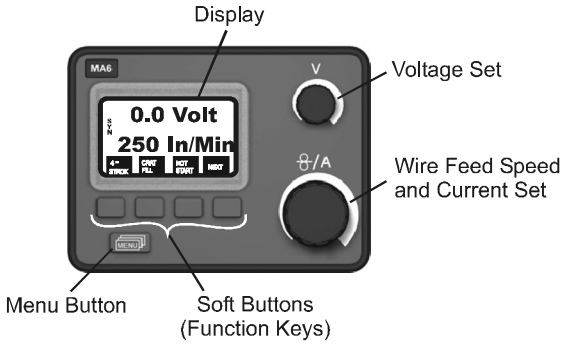
MMA-6 MMC (Man/Machine Communications)

Easy to set weld parameters for MIG, MIG Pulse, Stick or Gouging. Choose synergic weld parameters from of 107 possibilities. Set the wire feed speed and weld!

Internal Memory stores up to 10 different weld parameter set-ups. Recall parameters with a simple push of a button. Programmable soft keys allow direct access to flexible functions, such as hot start, crater fill, 2/4 stroke trigger, wire inch, gas purge, etc.

Large display gives real time voltage, current, and wire feed speed read-outs.

Preset inductance, gas pre & post flow, inch or metric units, auto weld schedule select, arc force, burnback and more. Update and change weld data using optional ESAT software for maximum flexibility.



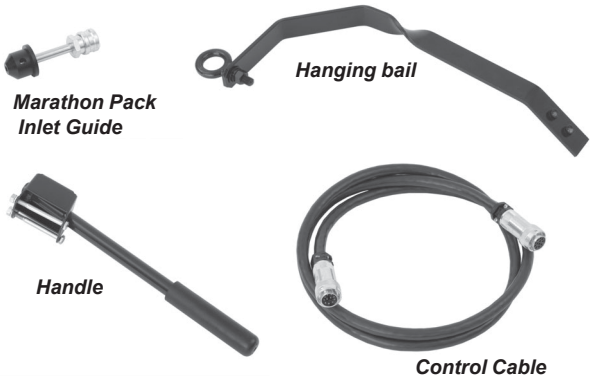
Options & Accessories

AristoDrive 4

Hanging Bail 0558003047
Handle Kit 0558002356
Wheel Kit 34324
Swivel Post 36172
Marathon Pack Inlet Guide 0558002519
Requires 899F50
Counterbalance Mini-Boom 0458705881
Reel Assembly 34323
Spool Cover 0558003047
Control Cable, 6.5ft.(2m) 0456527880
Control Cable, 260ft. (8m) 0456527881
Control Cable, 52ft. (16m) 0456527882
Control Cable, 82ft. (25m) 0456527883
Control Cable, 114ft. (35m) 0456527884

Trigger Leads, ESAB Style

Trigger Lead, GunMaster 250 0558001815
Trigger Lead, GunMaster 400 2075216



SECTION 1 DESCRIPTION

1.0 SAFETY

Before the AristoDrive 4-30 or 4-48 wire feeder is put into operation, the safety section at the front of this manual should be read completely. This will help avoid possible injury due to misuse or improper installation.

The definitions relating to the:

safety notations are described at the end of the Safety Section in the front of this manual — **read them and their specific text references carefully.**

1.1 DESCRIPTION AND SPECIFICATIONS

The AristoDrive 4-30 & 4-48 are heavy duty 4 roll drive 42 vac wire feeders with the ability to meet immediate and long term welding requirements of any weld shop. It's "Modular Design" technology permits simplicity and flexibility without unnecessary configuration and installation complexity. The innovative and "easy to use" MA-6 AristoDrive control panel (MMC or Man/Machine Communications) simplifies the functionality and features selection of the welding system. The drive stand gears are totally enclosed for safety, dependable and reliable operation.

The AristoDrive 4-48 wire feeder will handle the most demanding welding applications using short arc, spray and pulsed spray arc Mig (GMAW, GMAW-P & MCAW) welding or cored wire (FCAW) welding using the AristoPower 460 power source.

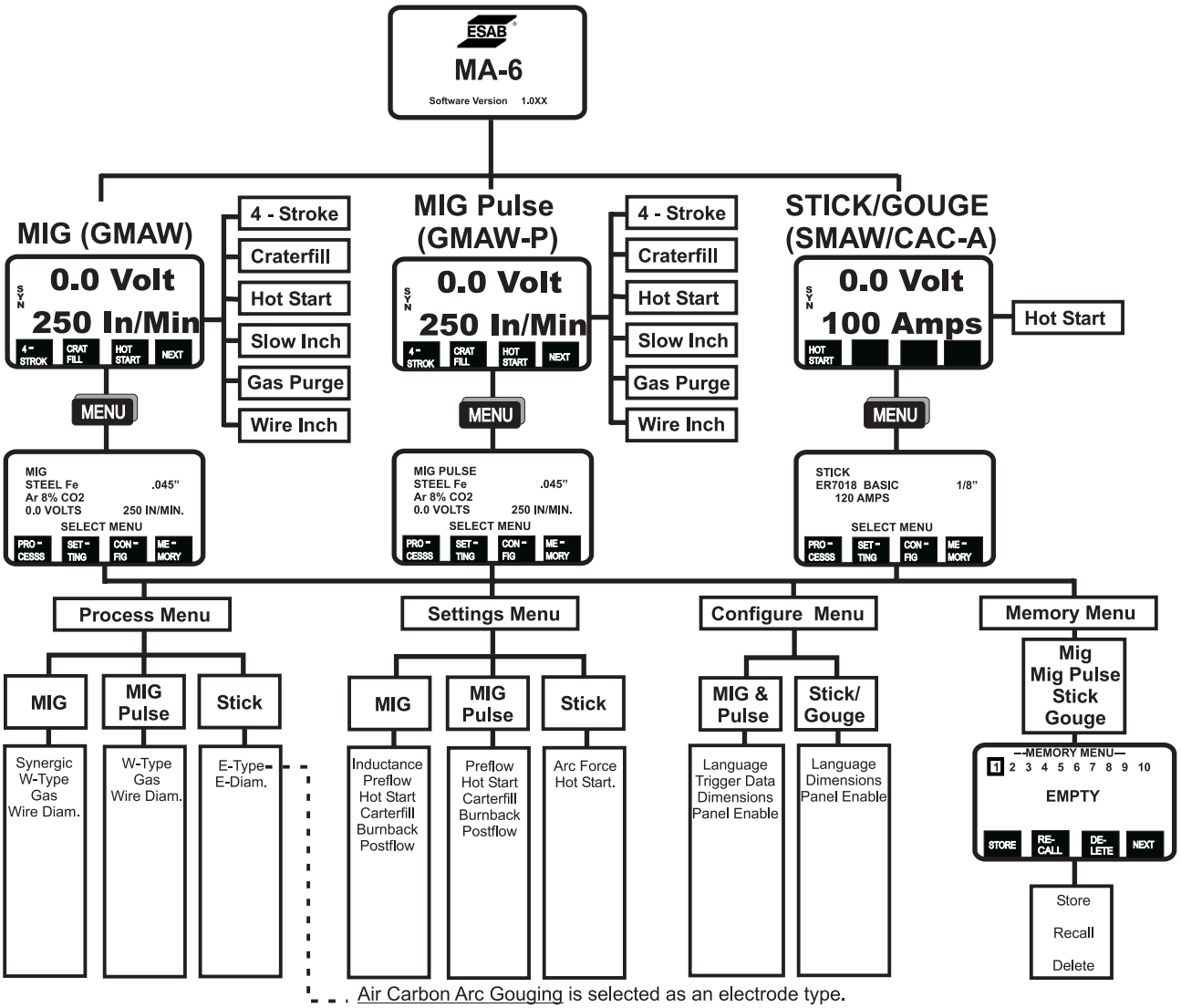
A. FEATURES:

- Modular MMC (Man/Machine Communications) panel for easy function and feature selection
- Heavy duty compact wire feed motor
- AristoDrive 4-48 has a heavy duty drive stand and large 48 mm drive rolls
- AristoDrive 4-30 has a heavy duty drive stand with 30mm rolls.
- Quick release 4-roll drive assembly; no readjustment of pressure required when rethreading wire.
- Quick change “No Tools” feed roll system
- Driven upper and lower drive rolls for positive feed force and maximum wire grip.
- All control circuits incorporated on one solid-state printed circuit board, mounted for easy access and removal.
- Gas purge switch for shield gas flowrate preset.
- Slow run-in panel button sets the wire feed speed at 1/2 the preset until the arc is struck for smoother arc starting.
- Jog panel button for wire inching without energizing power source contactor.
- 4-stroke, Hot Start and Craterfill panel buttons for easy feature selection.
- Low voltage circuit (12v) for gun trigger switch, to assure operator safety.
- NAS (#4 Tweco) gun adapter
- All cable and hose connections are quickly detachable.

B. Specifications AristoDrive 4-30 & AristoDrive 4-48
(See page 10)

C. Modular MMC System
Introduction
The interchangeable control panels (MMC) are available in 4 different models depending on the needs of the welding operator and the welding application. The panels are designed for easily removal and replacement. The following describes the functions and capability of each MMC panel.

MA-6 MMC MIG/STICK PANEL
The MA-6 MMC panel is a simple, intuitive yet feature rich control panel that will meet the weld requirements of most Mig, Stick and Arc Gouging applications. The flow chart below summarizes the features available.



D. Front Panel Components

1. **MA-6 MIG/STICK/GOUGING MMC PANEL**
2. **Power On/Off Switch**
   Controls the 42 vac power from the AristoPower 460 power source. A two prong “twist to lock” receptacle used to connect the Mig gun trigger circuit to the wire feeder.
3. **NAS (#4 Tweco) Power Pin Mig gun connection**

E. Rear Panel:

1. **Control Cable Receptacle**
   Receptacle that accepts the 19 pin control interconnect cable between the wire feeder and power source.
2. **Shield Gas Connection**
   Connect the shielding gas hose from the regulator/flowmeter to this fitting.
3. **Circuit Breaker**
   Prevents damage to the Main control PC board caused by excessive line current.
4. **Power Connection Block**
   Insulated connection point for the welding cables from the secondary side of the welding power source.

1.2 RECOMMENDED EQUIPMENT AND ACCESSORIES

A. Control Cable Assembly:
For connection of the AristoDrive 4-48 to ESAB power sources with a 12-pin receptacle, the following control cable assemblies are available:

6-foot (2 m) - 0456 527 880
25-foot (8 m) - 0456 527 881
50-foot (16 m) - 0456 527 882
80-foot (25 m) - 0456 527 883

C. Mig Welding Guns:
Gun Master 250 Gas Cooled
Gun Master 400 Gas Cooled

D. Mig Gun Adapters
Only Tweco #4 is supported

E. Feed Rolls and Outlet Guides:
The appropriate feed roll, outlet guide and center guide is required for optimum wire feeding. See Table 2-1 & 2-2.

F. Shielding Gas Regulator/Flowmeter:
R-33 FM 580 (Argon) - P/N 21557
R-33 FM 360 (CO_2) - P/N 21558
R-5007 Argon/Helium/Nitrogen - P/N 998124
R-5008 CO_2 - P/N 998125.

G. Gas Hoses:
Argon/Helium, Nitrogen - P/N 40V77 (12-1/2 ft.) or P/N 34V38 (25 ft.)
Heavy Duty - P/N 19416 (12-1/2 ft.)* or P/N 19415 (25 ft.)*

* Must be used for CO_2 and can also be used for Argon/Helium/Nitrogen.

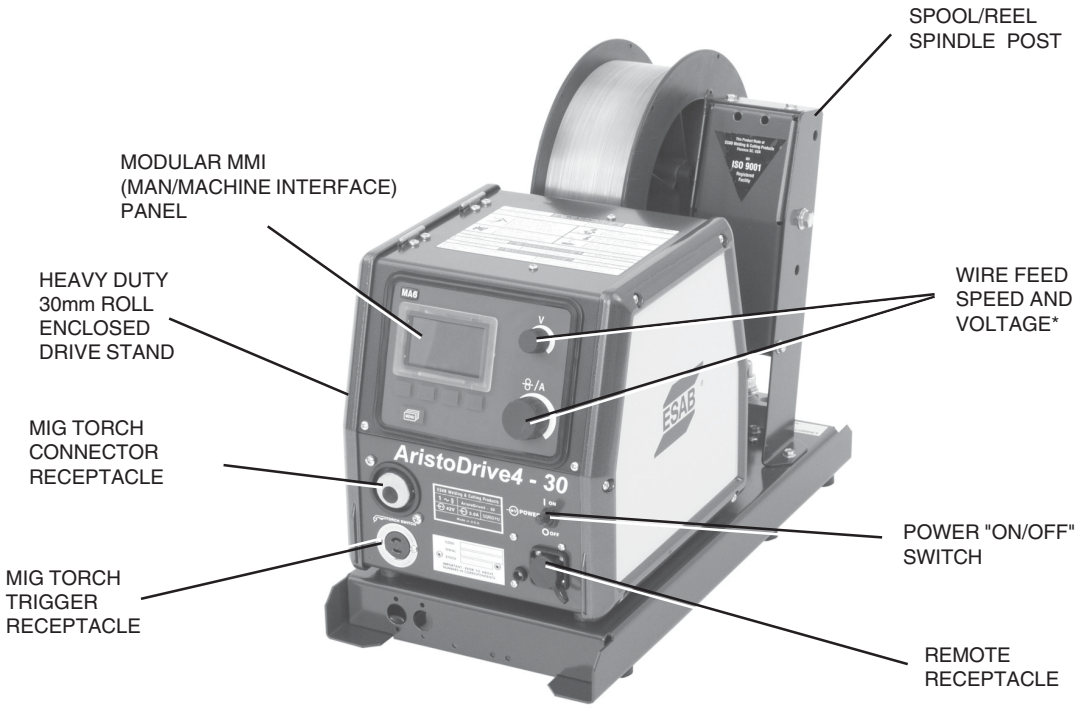


Figure 1-1. AristoDrive 4-30 Wire Feeder

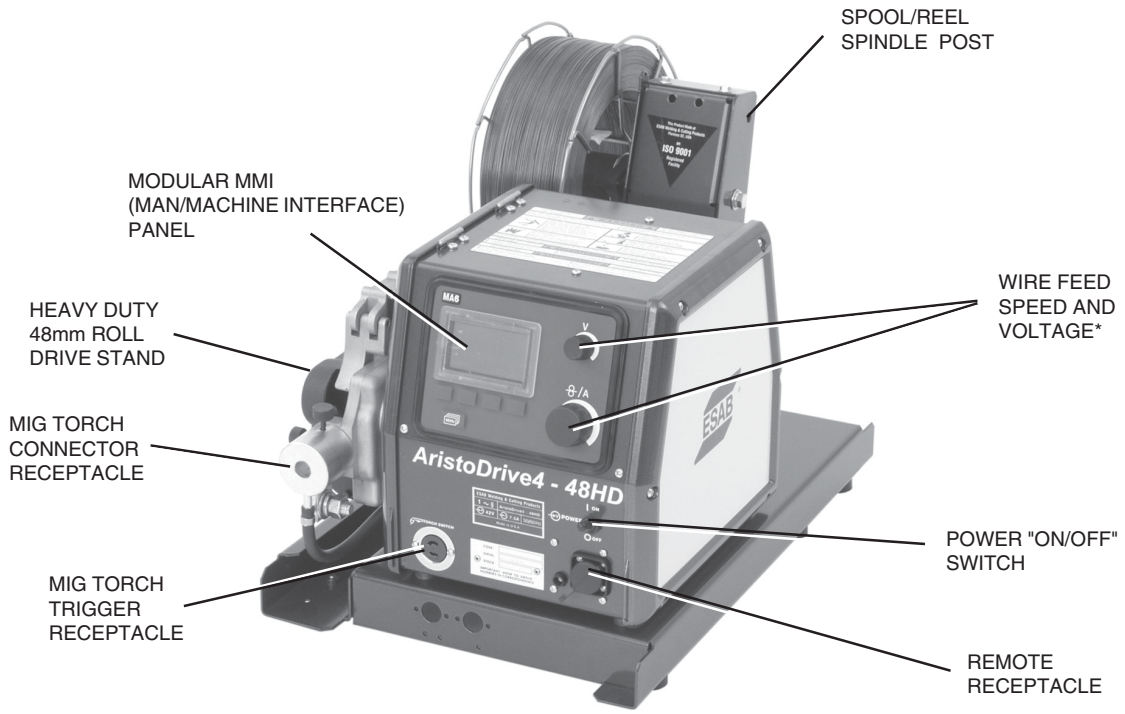


Figure 1-2. AristoDrive 4-48 Wire Feeder

H. OPTIONAL ACCESSORIES

1. **Lifting Bracket - Hanging Bail (P/N 0558003047):**
   Mounts at the top of the wire feeder spool support. Enables you to mount the wire feeder overhead on a boom or trolley system.

2. **Reel Assembly (P/N 34323):**
   Reel slips over spindle to allow use of coiled wire.

3. **Swivel Post (P/N 36172):**
   Installs on power sources such as ESAB 353cv, 453cv MultiPower 460 and 460 Pulse, or 653cvcc and allows the wire feeder to swivel freely.

4. **Swivel Post w/Mounting Bracket (P/N 34075):**
   Attaches to inverter cart (P/N 31700) or other flat mounting surface and allows the feeder to swivel freely

5. **Handle Kit (P/N 0558002356)**
   Includes handle with rubber grip and mounting hardware.

NOTE
The Counterbalance Mini-Boom cannot be used with 14" spools ofr 65 lb. coils.

6. **Wheel Kit (P/N 34324))**
   Makes it easy to roll wire feeder around job site Cart includes base, front swivel caster wheels, rear caster wheels and mounting hardware.

7. **Spool Enclousure Kit (AristoDrive 4-30 Only P/N 0558002357)**
   Cover and enclosure provides protection for a 12" spool of wire against dust and dirt.

8. **Counterbalance Mini-Boom (P/N 0458705881)**
   Mounts to the power source swivel post and reduces wire feeding problems caused by sharp bends in the gun liner and cables by keeping the gun cable off the floor. Includes boom and mounting hardware. (requires Swivel Post - P/N 36172)

9. **Marathon Pack Inlet Guide for AristoDrive 4-30 (P/N 0558002354)**
   Allows the secure connection of a Marathon Pack conduit/liner to the rear panel of the AristoDrive wire feeder.
   Requires Quick Disconnect Adaptor Kit (QAC) ..... P/N 899F50

10. **Marathon Pack Inlet Guide for AristoDrive 4-48 (P/N 0558002519)**
    Allows the secure connection of a Marathon Pack conduit/liner to the rear panel of the AristoDrive wire feeder.
    Requires Quick Disconnect Adaptor Kit (QAC) P/N 899F50

11. **Heavy Duty Pressure Spring (P/N - 0558002142)**
    Recommended for the 4-48 Drivestands using solid wires of 1/16" diameter and greater.

SECTION 1 DESCRIPTION

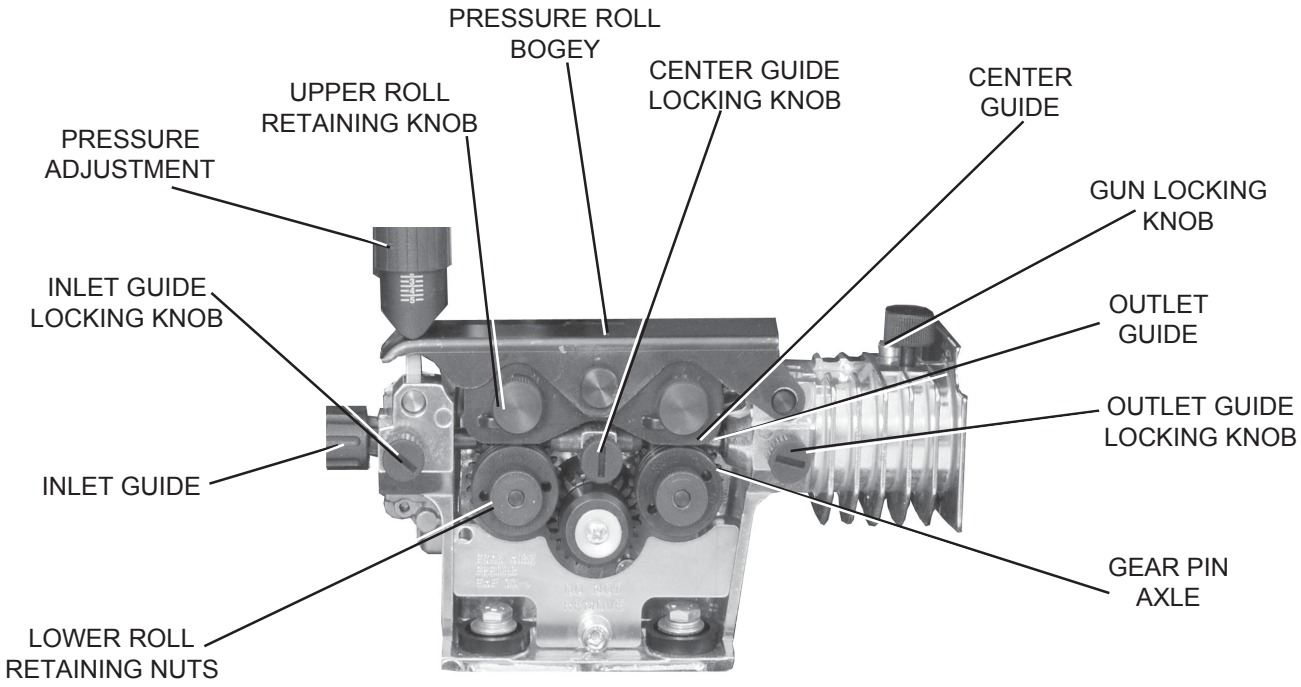


Figure 2-1 AristoDrive 4-30 Drive Stand

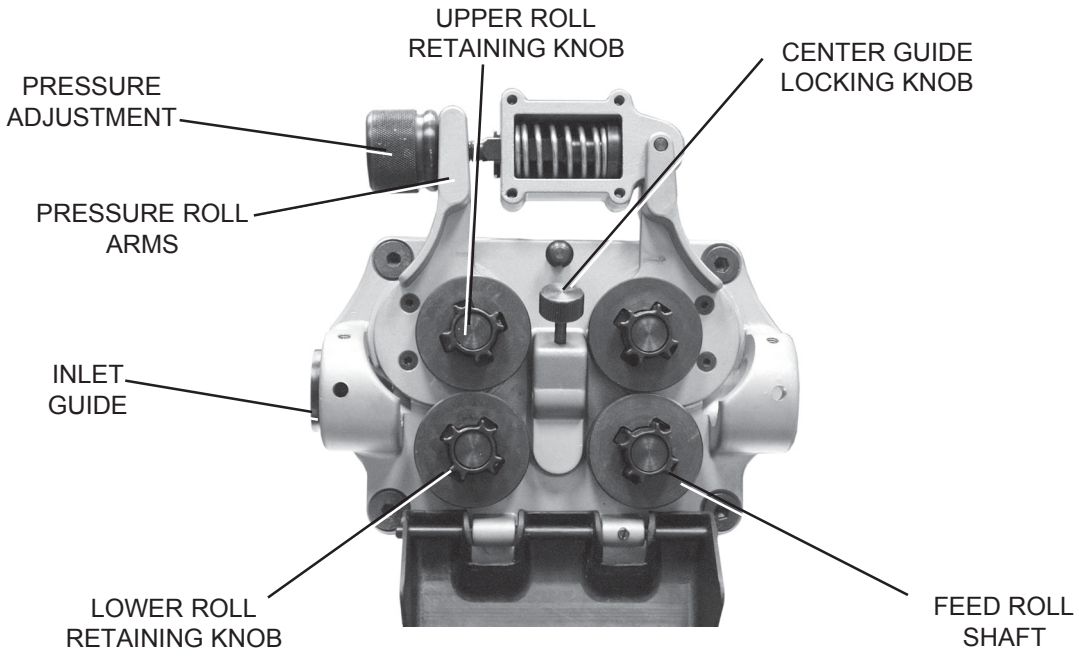


Figure 2-2 AristoDrive 4-48 Drive Stand

Table 2-1 - AristoDrive 4-30 Feed Roll Table

Wire Size inch	Wire Size mm	Part Number
Solid Wire V Groove (4 req'd.)		
.023-.030	0.8-0.9	0459052001
.035/.040-.045	0.9/1.0-1.2	0459052003
.052-1/16	1.4-1.6	0459052013
Cored Wire Serrated (4 req'd.)		
.035-.045	0.9-1.2	0558002352
.045-.052	1.2-1.4	37319
1/16-5/64	1.6-2.0	37320
Aluminum U Grooved (4 req'd.)		
.035-3/64	0.9-1.2	36860
3/64-1/16	1.2-1.6	36861
Inlet Guide (1 req'd.)		
All	3mm	0455049001
Center Guides (1 req'd.)		
Steel	2mm	0455072001
Steel	3mm	0455072002
Aluminum	2mm	0456615001
Outlet Guides (1 req'd.)		
Steel	1.5mm	0458690880
Steel	2mm	0458690881
Steel	3mm	0458690882
Aluminum	2mm	0458690883

Table 2-2 - AristoDrive 4-48 Feed Roll Table

Wire Size inch	Wire Size mm	Part Number
Solid Wire V Groove (4 req'd.)		
.035/.040	.9/1.0mm	0558002237
.045	1.2mm	0558002238
.052	1.4mm	0558002239
1/16" (.062)	1.6mm	0558002240
Cored Wire Serrated (4 req'd.)		
.035	1.0mm	058002227
.045	1.2mm	058002228
.052	1.4mm	058002229
1/16" (.062)	1.6mm	058002230
5/64 (.078)	2.0mm	058002231
3/32 (.093)	2.4mm	058002232
.109	2.8mm	058002233
.125	3.2mm	058002234
Aluminum U Grooved (4 req'd.)		
.030	.8mm	055800243
.035/.040	.9/1.0mm	055800244
3/64 (.047)	1.2mm	055800245
1/16" (.062)	1.6mm	055800247
3/32 (.093)	2.4mm	055800248
Inlet Guide (1 req'd.)		
All	3.5mm	0558002347
HD Brass	3.5mm	0558002517
Center Guides (1 req'd.)		
.023-.045 Steel	1.5mm	0558002223
.052-.062 Steel	2.0mm	0558002224
5/64 (.078) Steel	2.5mm	0558002225
.093-.125 Steel	3.5mm	0558002226
.023-.045 Aluminum	1.5mm	0558002307
.047-.062 Aluminum	2.0mm	0558002308
3/32 (.093) Aluminum	3.5mm	0558002310
Outlet Guides (1 req'd.)		
.023-.045 Steel	1.5mm	0558002215
.052-.062 Steel	2.0mm	0558002216
5/64 (.078) Steel	3.0 mm	0558002217
.093-.125 Steel	3.5mm	0558002218
.023-.045 Aluminum	1.5mm	0558002219
.047-.062 Aluminum	2.0mm	0558002220
3/32 (.093) Aluminum	3.0mm	0558002222

2.0 INSTALLATION

After checking to be sure you have all required components and accessories, proceed as follows:

A. HOSE AND ELECTRICAL CONNECTIONS

1. Connect shielding gas supply hose to the rear panel of the feeder.
2. Connect the 19-pin control cable between the AristoDrive rear panel and power source wire feeder connection.
3. Connect suitably sized power cable between the power source and the power block at the rear base of the feeder.

B. CENTER AND OUTLET GUIDES

1. Choose the correct type and size center and outlet guide for the type of drive stand on the feeder. See Figure 2-1 or 2-2 and Table 2-1 or 2-2.
2. Insert the center guide into the drive stand center support between the front and rear drive axles. Tighten the locking knob to secure in place.
3. Insert the outlet guide tapered end first into the front of the Mig gun adapter and secure with locking knob.

C. MIG GUN CONNECTIONS

Gun Master 250 and 400

1. Connect Mig Gun to feed roll accessory drive by loosening the locking knob on the drive roll accessory gun adapter and insert the gun power pin into the gun adaptor then tighten locking knob.
2. Connect the gun trigger twist lock plug into the mating receptacle on the front panel of the AristoDrive feeder and lock by twisting 1/4 turn.

D. INSTALLING 4-30 FEED ROLL

Lower Feed Rolls

1. Release the tension lever on the pressure roll bogey and flip up to access the drive rolls
2. Remove the lower feed roll retaining knobs.
3. Separate the feed roll from the gear pin axle and slip the new feed roll on the gear shaft, engaging the gear pins.
4. Reinstall the feed roll retaining knobs.

Upper Feed Rolls

1. Release the tension lever on the pressure roll bogey and flip up to access the drive rolls
2. Remove the upper feed roll retaining knobs by turning knob 1/4 turn and pulling axle straight out.
3. Separate the feed roll from the gear pin axle and slip the new feed roll on the gear shaft, engaging the gear pins.
4. Reinstall the feed roll retaining knob and axle.

E. INSTALLING 4-48 FEED ROLLS

1. Release the tension levers on the pressure roll arms and flip outward (away from the center of the drive stand) to lift the top rolls from the bottom rolls.
2. Twist the feed roll retaining knobs so that the flutes align with the axle pin.
3. Slip the feed roll on the axle and over the axle pins.
4. Twist the retaining knob 1/8 turn to lock the rolls in place.

F. INSTALLING SPOOL OF WIRE (4-48)

1. Remove “S-pin” clip from spindle.
2. Position the spool of wire so that when it is placed on the spindle, wire will be drawn to the feed roll from the bottom of the spool. The spool should be held so that the index hole on the spool will engage the pin on the spindle.
3. Slide the spool onto the spindle until it engages the spindle pin. Lock in place with the S-pin clip.
4. Loosen the brake screw in the center of the spindle hub, then tighten it just enough to prevent coasting of the spool when wire is drawn from it. Too much pressure will load the wire feed motor unnecessarily. Too little pressure will permit the spool to overrun, causing the wire to come loose and tangle.
5. Thread wire to gun as follows:
    a. Round off the free end of the welding wire with a file.
    b. Release the tension levers on the pressure roll arm assembly.
    c. Thread the wire through the inlet guide, over the feedroll grooves and into the outlet guide.
    d. Close the pressure roll making sure the wire is seated in both the top and bottom feed roll grooves.
    e. Remove nozzle and contact tip from the gun. Turn on the Power Source using the main power switch. Inch the wire, using the AristoDrive jog switch, until the wire exits the front end of gun. Thread the contact tip over the wire and tighten into the tip adapter. Replace gun nozzle.
6. When wire coils are to be used, raise the spindle assembly to its highest mounting position in the spindle post. Mount the wire reel onto the spindle as though it were a spool (see 1 and 3 above). Remove wing nuts and cover plate from reel. Remove coil from its package, **but do not remove its binding wires or straps**. Slide coil onto reel so that wire will be drawn from bottom of coil (starting end for a coil is always the outer end). Replace reel cover plate and wing nuts. Cut off coil tie wires. Adjust brake screw and thread wire to the gun as covered in 4 and 5 above.

G. ADJUSTING THE PRESSURE ROLL ASSEMBLY

When a new wire size or type installed, set the pressure adjustment as follows:

1. Unscrew the pressure adjustment knob until the pressure knob is free.
2. Alternately press and release the gun trigger switch while slowly tightening the pressure adjusting knob until the wire begins to feed without slipping. The pressure applied should be the minimum required to provide positive, nonslip wire feed. Too little pressure will result in wire slippage while excessive pressure will scar and deform the wire.

3.0 ADJUSTMENTS AND OPERATION

A. CONTROL SETTINGS

1. Turn the AristoDrive **POWER** switch to the “ON” position then turn on the AristoPower power source.
2. Set the weld process, wire type, wire size and shielding gas being used on the MA-6 MMC panel. See the MA-6 Instruction manual for more details and complete MA-6 operation.
3. Set the wire feed rate by adjusting the **WIRE FEED SPEED** control knob on the MMC panel. The wire feed rate controls the weld current furnished by the CV power source.

B. FEEDING WIRE

If wire has been threaded through gun and contact tip, simply operate the jog button or cut off wire, as required, so that the wire extends about 1/2 in. beyond the end of the gun nozzle.

C. SHIELDING GAS FLOW RATE

Actuate the gas purge button on the MA-6 Panel and set gas flow rate at the shielding gas regulator-flowmeter to 35 to 40 cfh. Maintain flow for at least 15 seconds to insure adequate purging of gas hose and gun. Preflow/postflow times can be set under the SETTINGS menu on the MA-6 MMC panel.

D. SLOW INCH BUTTON

Press the SLOW INCH button if a slow run-in of the weld wire is desired. The wire feed speed will then be at 1/2 the preset wire feed rate when the gun trigger is pulled until the arc is struck. The wire speed will then increase to the preset speed for welding. This functions gives smoother arc starting for some weld applications.

E. MAKING THE WELD

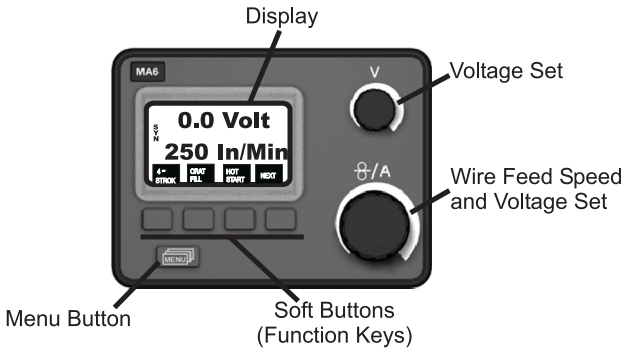
Start to weld by pressing the gun trigger lever. This closes the welding contactor, and starts gas flow and wire feed. When the welding wire touches the workpiece an arc will be established. The trigger switch lever must be depressed for the duration of the weld (unless the trigger latch option has been installed and set in the trigger latch position). Welding action will be stopped and all services discontinued when the trigger switch lever is released and returns to its original position. If the gun is withdrawn from the workpiece during welding, the arc will be interrupted, but shielding gas flow and welding wire feed will continue until the switch lever is released.

3.1 OPERATING SEQUENCE

NORMAL

1 . Close gun trigger switch.
— Gas solenoid opens, weld contactor closes, wire feed motor runs at preset wire feed speed, or slow inch, whichever has been selected.

2. Release gun trigger switch.
— Wire feed motor de-energized, brake circuit enabled.
— Anti-stick circuit energized.
— Weld contactor opens.
— Burnback circuit times out
(delay determined by setting of Burnback potentiometer).
— Gas solenoid valve closes.



4.0 TROUBLESHOOTING

Table 4-1 AristoDrive 4-48 Troubleshooting Chart

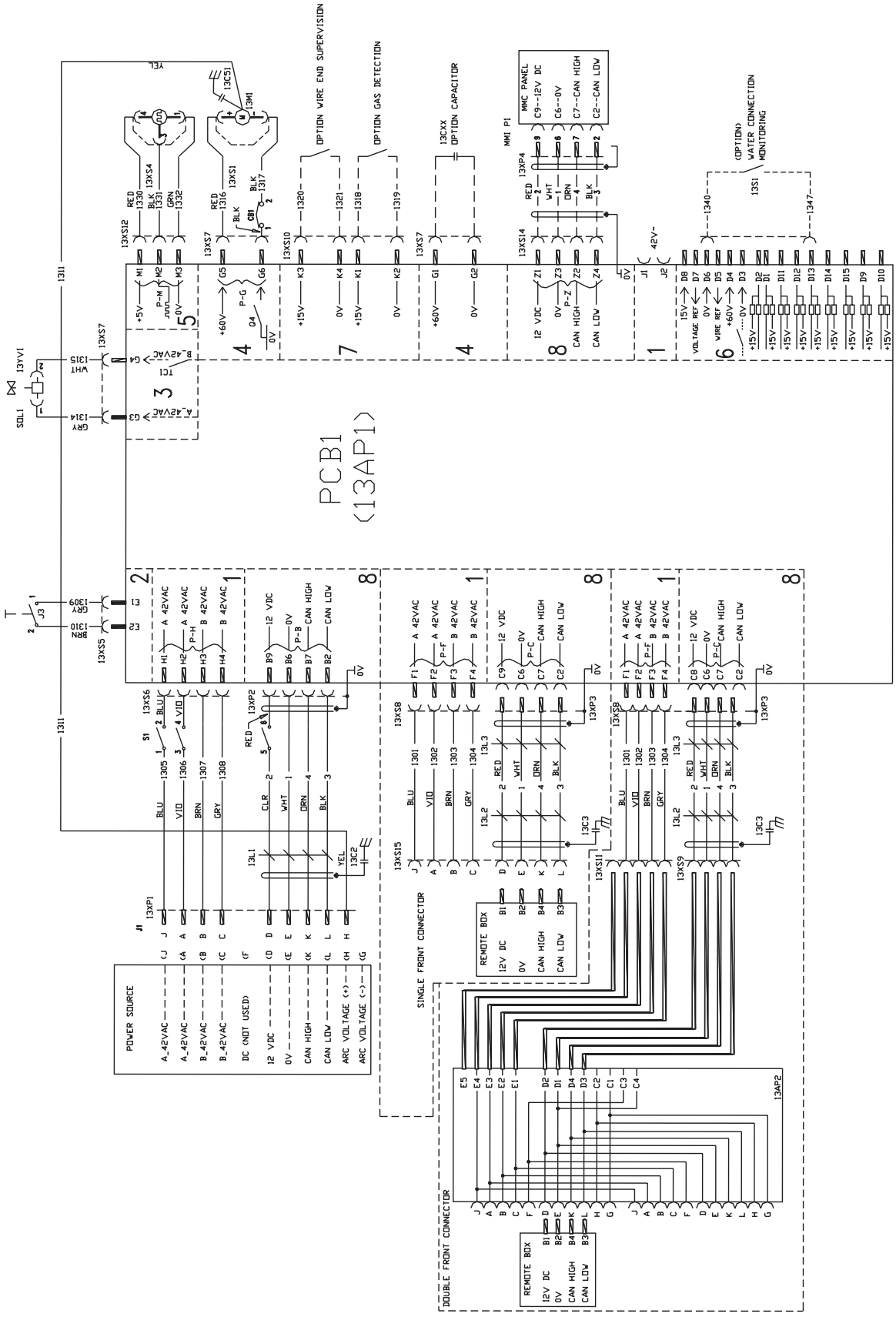
Nothing works	Check if power source is energized Check if AristoDrive "Power" switch is in the "ON" position
Wire Feeder is "ON", motor does not run, gas valve and welding power source contactor do not energize	Check CB fuse on AristoDrive Rear Panel Check weld gun trigger plug connection
Wire feeds, shielding gas flows, but no power to electrode wire	Check if power source has Open Circuit Voltage Check if weld cables are connected Check interconnect cable for continuity or loose connection
Motor runs slowly and/or gas solenoid valve is "chattering"	Check for 42 vac input voltage
Welding wire feed cannot be shut OFF and feeds continuously	Short in welding gun trigger leads.
Electrode wire stops or feeds erratically during welding	Check weld gun trigger connection Check weld gun trigger switch Readjust spool spindle brake and pressure roll tension Check for the correct size and type drive rolls for the electrode wire being used. Clean or replace dirty or worn drive rolls. Check for incorrect type or sized outlet and center guides Check and/or replace the weld gun contact tip and/or liner if worn or damaged Remove weld spatter and debris form weld gun nozzle and contact tip Have an ESAB Authorized Repair station check the motor drive and control PCB.

A. MAINTENANCE

If this equipment does not operate properly, stop work immediately and investigate the cause of the malfunction. Maintenance work must be performed by an experienced person, and electrical work by a trained electrician. Do not permit untrained persons to inspect, clean, or repair this equipment. Use only recommended replacement parts.

B. GENERAL MAINTENANCE

Little maintenance is required to keep the wire feeder in top operating condition. It is important, however, that moving parts such as feed and pressure rolls, wire feed motor, etc., be kept clean and free of dust or dirt. Cleaning is best accomplished by regularly blowing off these parts with dry compressed air. This should be done once for every eight hours of operating time, more often if necessary.



AristoDrive 4-30 and 4-48 Schematic Diagram

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PCB1							
	P-B	P-C	P-E	P-F	P-G	P-H	P-M	P-Z
1			J3-1 GRY	J2-J BLU		S1-2 BLU	M1 P1-4 RED	MMI P1-9 RED
2	J1-L BLK	J2-L BLK	J3-2 BRN	J2-A VIO		S1-4 VIO	M1 P1-3 BLK	MMI P1-7 ORN
3				J2-B BRN	SDL1-1 GRY	J1-B BRN	M1 P1-1 GRN	MMI P1-6 WHT
4				J2-C GRY	SDL1-2 WHT	J1-C GRY		MMI P1-2 BLK
5					M1-PDS RED			
6	J1-E WHT	J2-E WHT			CB1-1 BLK			
7	J1-K ORN	J2-K ORN						
8								
9	S1-6(SPL) RED	J2-D RED						
10								

J1	
A	S1-3 VIO
B	PCB1 P-H3 BRN
C	PCB1 P-H4 GRY
D	S1-5 CLR
E	PCB1 P-B6 WHT
F	
G	
H	DRIVESTAND (SPL) YEL
J	S1-1 BLU
K	PCB1 P-B7 ORN
L	PCB1 P-B2 BLK
M	

J2	
A	PCB1 P-F2 VIO
B	PCB1 P-F3 BRN
C	PCB1 P-F4 GRY
D	PCB1 P-C9 RED
E	PCB1 P-C6 WHT
F	
G	
H	
J	PCB1 P-F1 BLU
K	PCB1 P-C7 ORN
L	PCB1 P-C2 BLK

MMI P1	
1	
2	PCB1 P-Z4 BLK
3	
4	
5	
6	PCB1 P-Z3 WHT
7	PCB1 P-Z2 ORN
8	
9	PCB1 P-Z1 RED

M1 P1	
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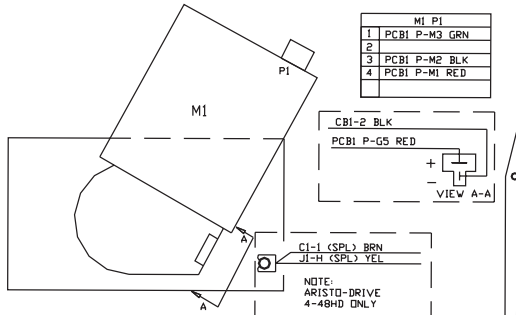
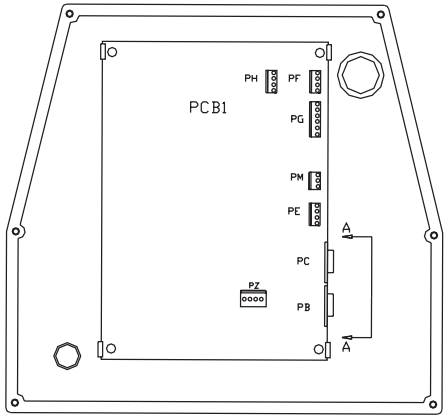
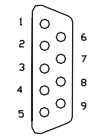
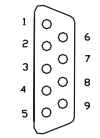
2	
3	PCB1 P-M2 BLK
4	PCB1 P-M1 RED



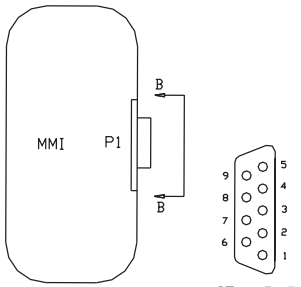
"REAR VIEW OF DRIVESTAND"
"ARISTO-DRIVE 4-48HD AND 4-30"



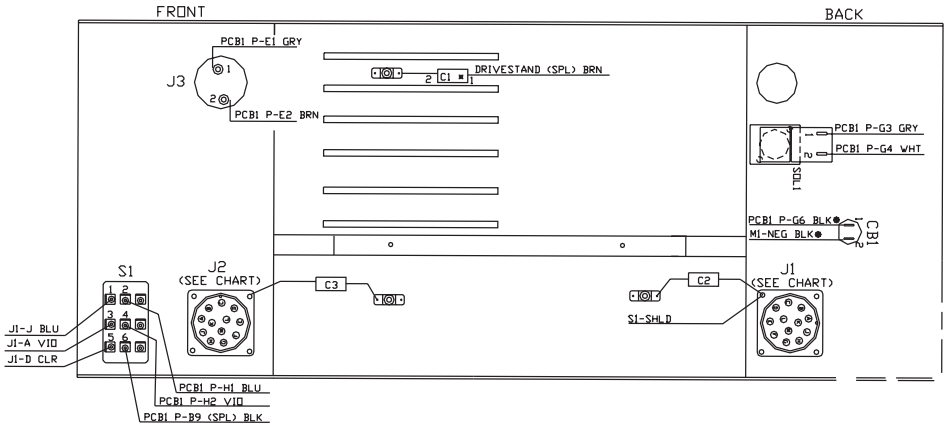




VIEW A-A



VIEW B-B



AristoDrive 4-30 and 4-48 Schematic Diagram

SECTION 4 TROUBLESHOOTING

5.0 SPARE AND REPAIR PARTS

Replacement Parts are illustrated on the following pages. When ordering replacement parts, order by part number and part name, as illustrated on the figure

Always provide the series or serial number of the unit on which the parts will be used. The serial number is stamped on the unit nameplate.

5.1 ORDERING

To assure proper operation, it is recommended that only genuine ESAB parts and products be used with this equipment. The use of non-ESAB parts may void your warranty.

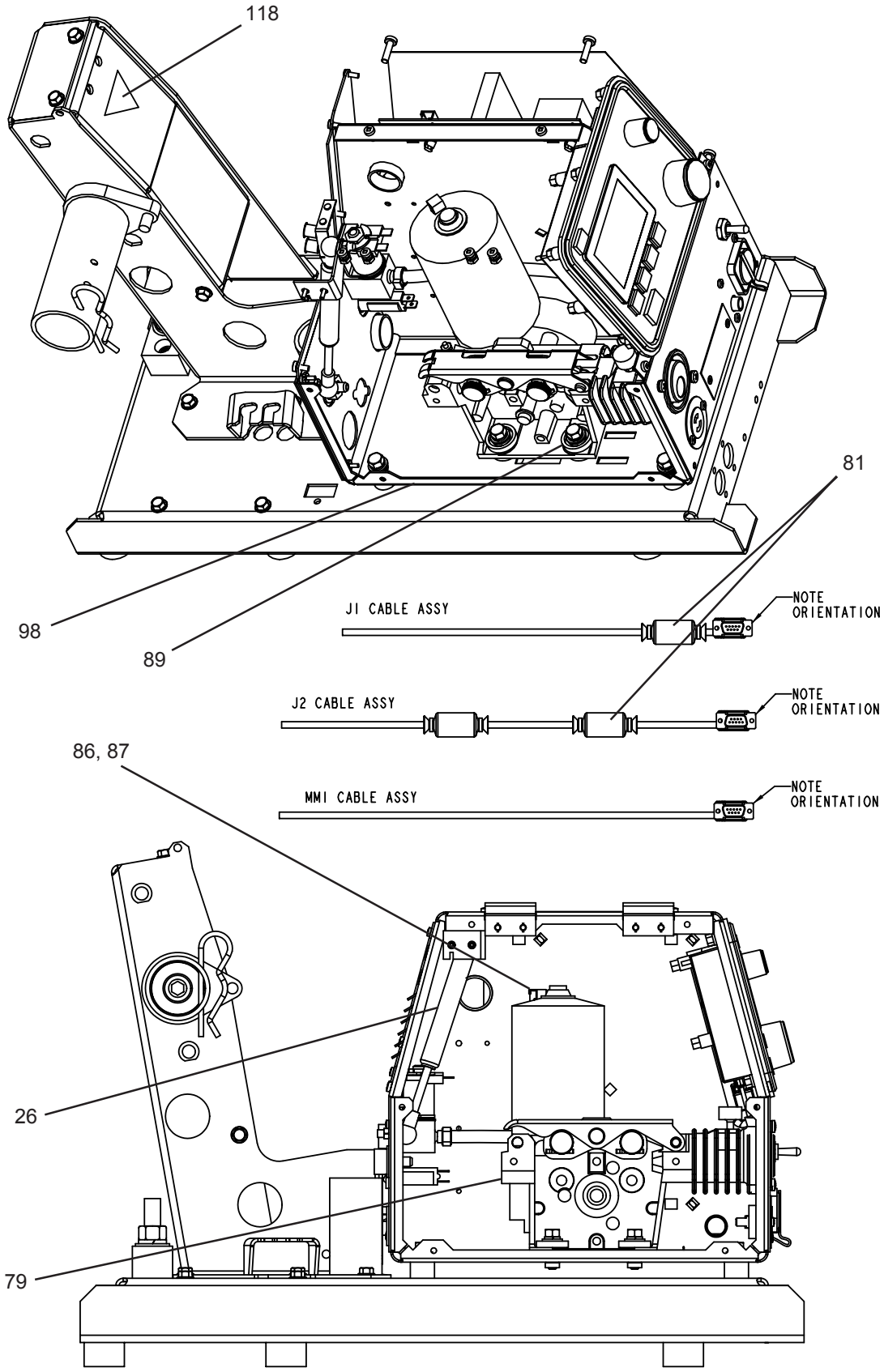
Replacement parts may be ordered from your ESAB distributor or from:

ESAB Welding & Cutting Products
Attn: Customer Service Dept.
P.O. Box 100545, 411 S. Ebenezer Road
Florence, SC 29501-0545

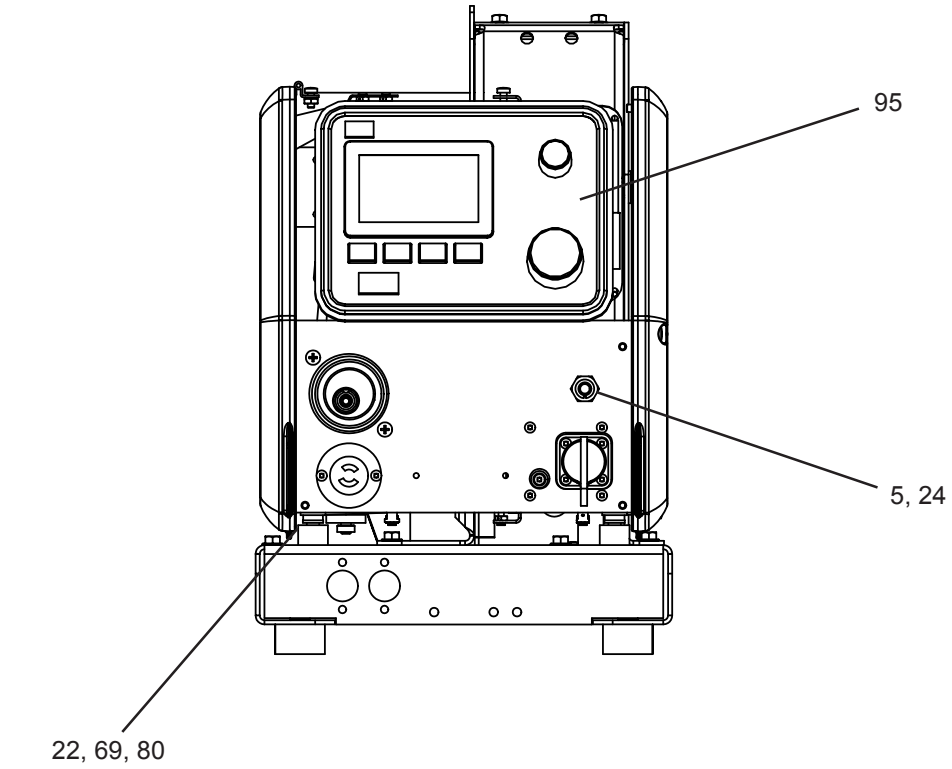
Be sure to indicate any special shipping instructions when ordering replacement parts.

To order parts by phone, contact ESAB at 1-843-664-5540. Orders may also be faxed to 1-800-634-7548. Be sure to indicate any special shipping instructions when ordering replacement parts.

Refer to the Communication Guide located on the last page of this manual for a list of customer service phone numbers.



AristoDrive 4-30 Wire Feeder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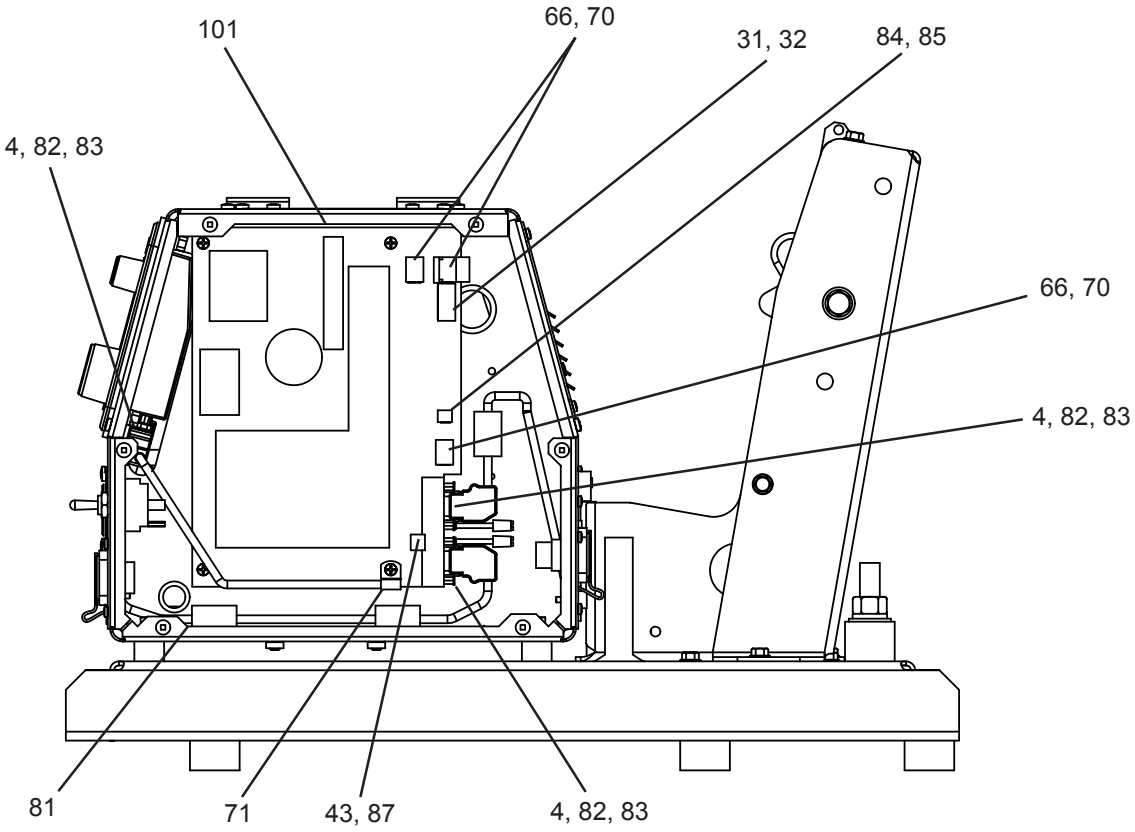
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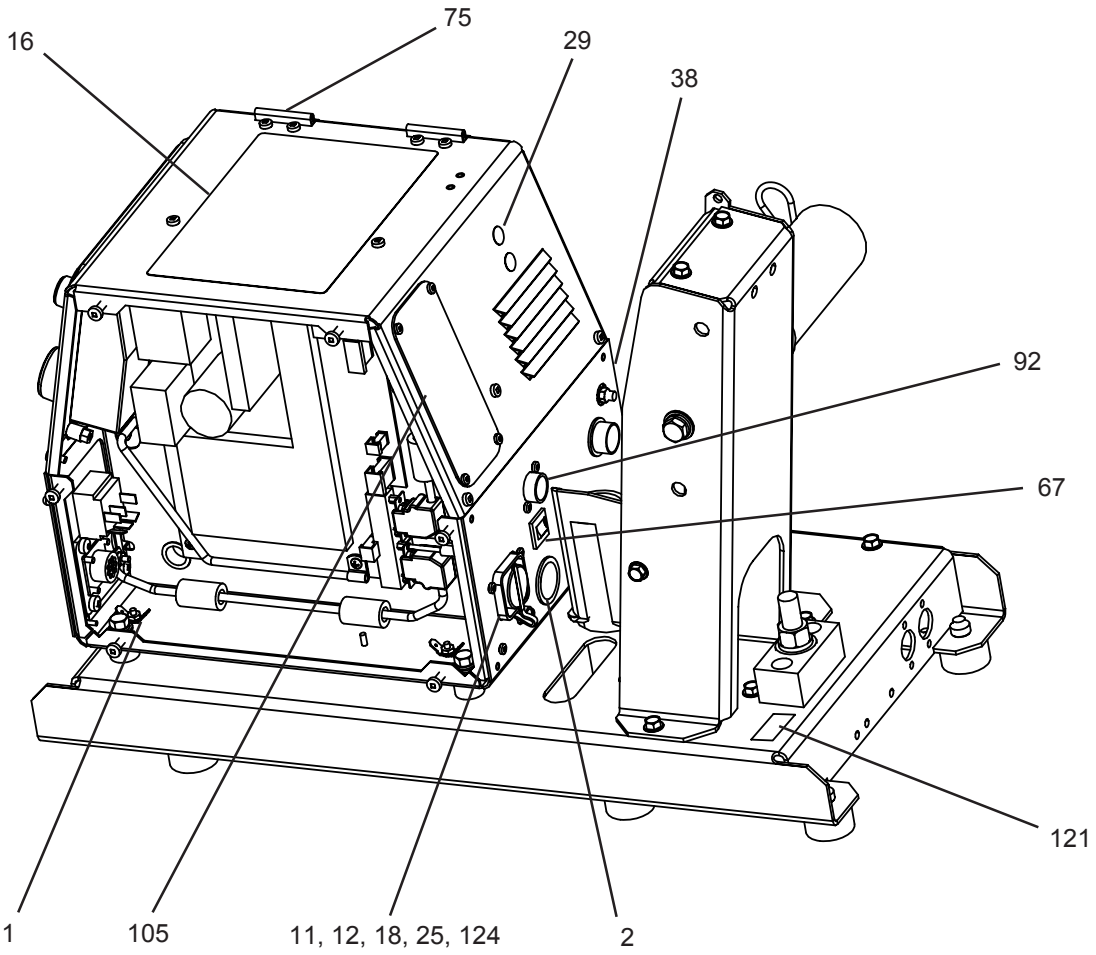
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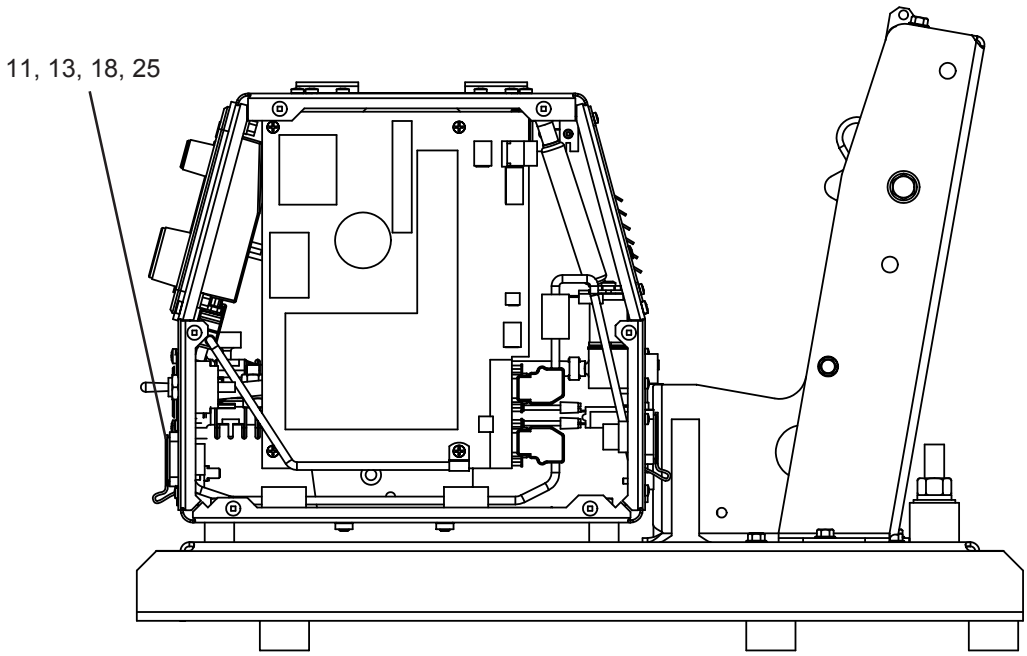
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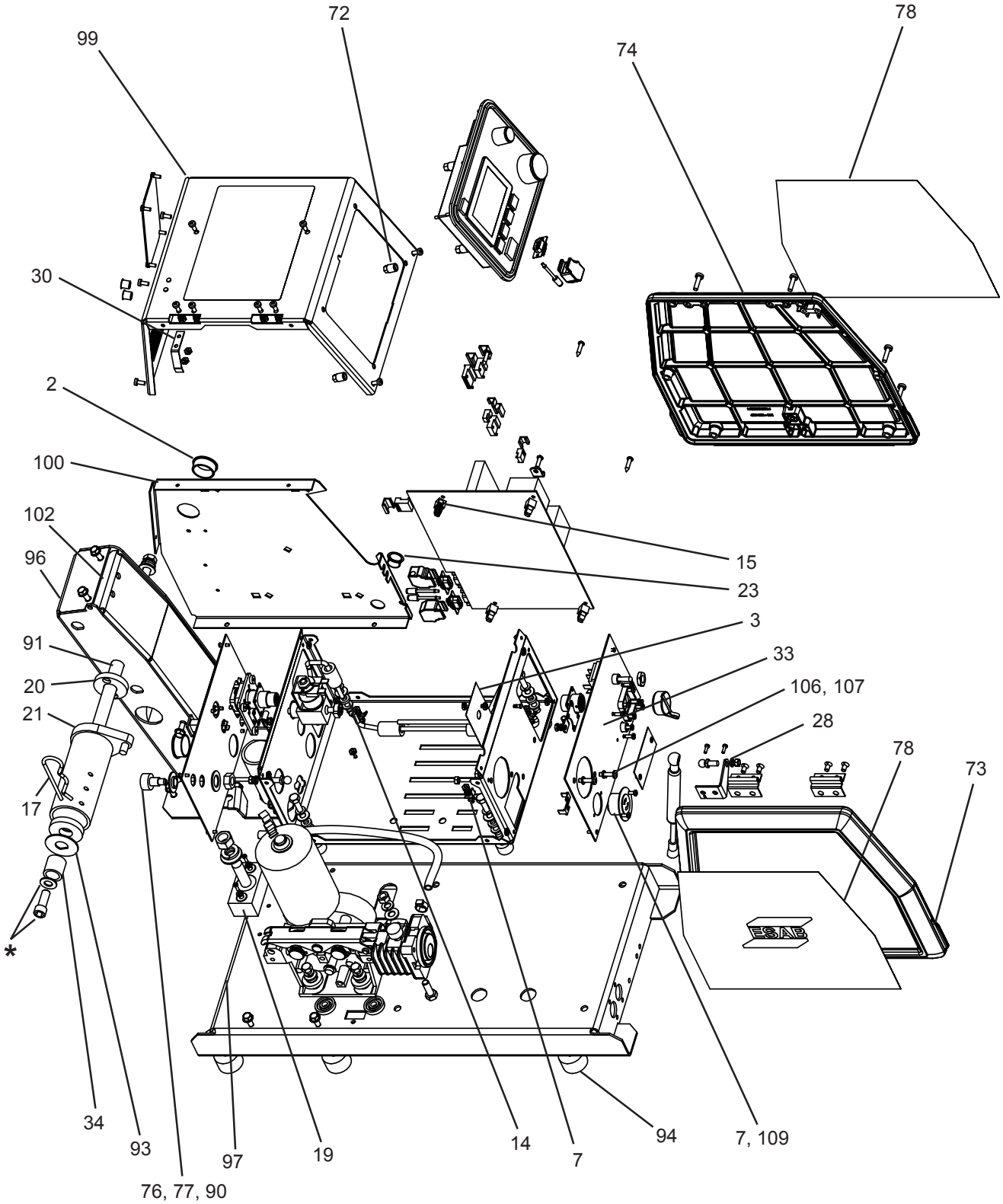
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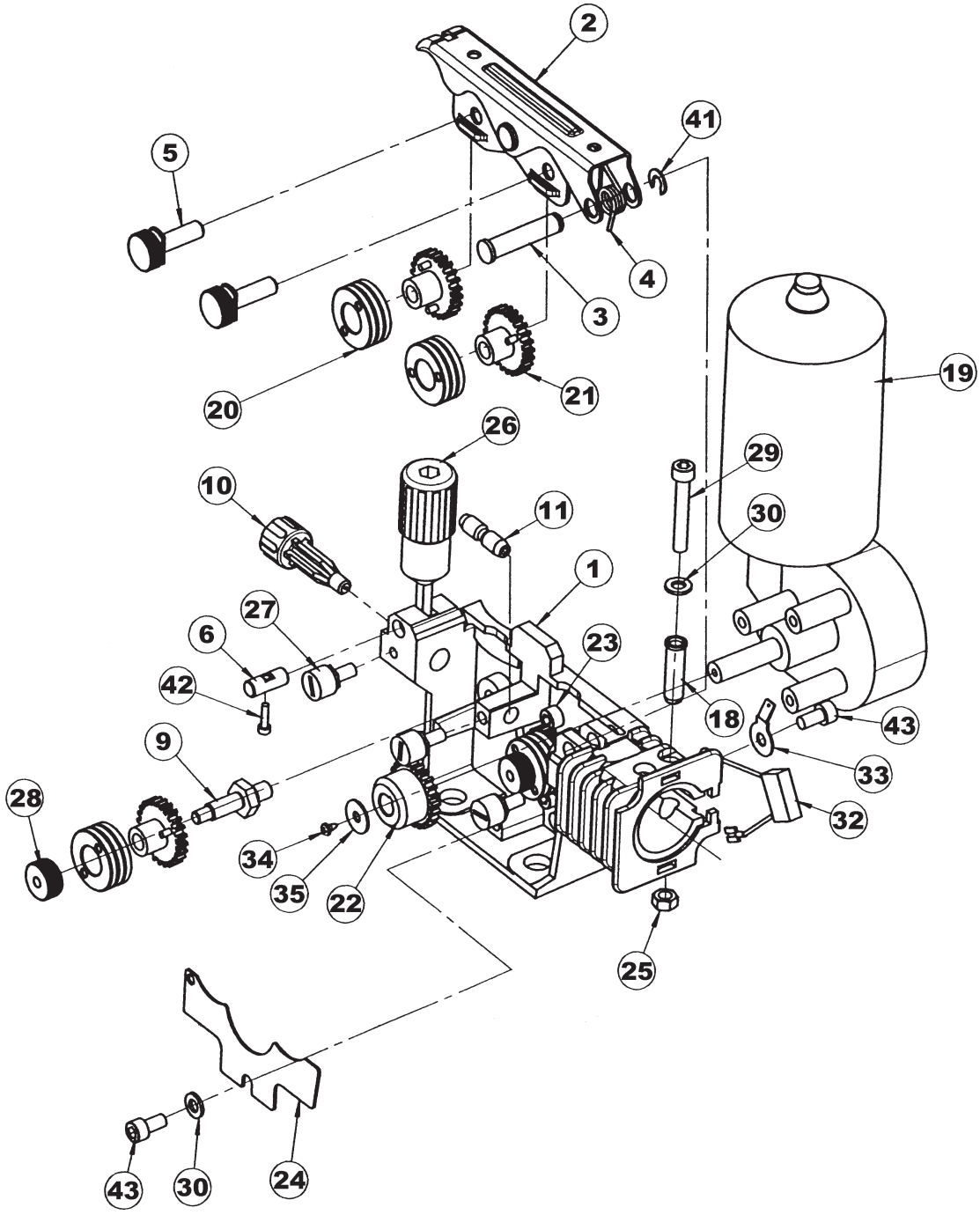
ESAB

ITEM NO.	PART OR CODE NO.	QTY.	DESCRIPTION
1	634220	2	TAB
2	639533	2	BUSHING SNAP .88 ID 1.09 MH .45L
3	676876	1	INSULATOR NOMEX
4	2213451	3	CONN D-SUB 9 PIN
5	672508	1	SWITCH TOGGLE 3PDT 2 POS 15A 125V
7	951889	3	ADAPTOR TAB PUSH ON 90 DEG
11	0366285001	2	PROTECTION CAP
12	0368543003	1	CONN BOX RECPT BURNDY 12PIN
13	0368544003	1	CONN BOX RECPT 12SOCKET
14	952860	2	CLAMP 1-EAR W/INSERT 12.8 GER
15	2062195	4	FASTENER EXPANSION
16	2091514	1	LABEL WARNING WELD & CUT
17	634347	1	CLIP HITCH .16DX3.25L .751D CD
18	0457799001	2	PLATE SCREEN
19	674156	1	ADAPTOR PWR CABLE MOLDED
20	948255	2	PAD BRAKING
21	948258	1	SPINDLE MOLDED
22	950302	4	WASHER SHLDR
23	950823	1	BUSHING SNAP
24	951474	1	SWITCH SEAL BLACK
25	0457800001	2	INSULATION CAN CONNECTOR
26	0458682880	1	GAS SPRING COMPLETE
28	0458701001	1	ANGLE PLATE DD4
29	13730802	2	PLUG HOLE .38 DIA.
30	0458750001	1	PLATE SPRING DD4
31	13735311	1	CONNECTOR 20 AWG 6 PIN
32	13735312	1	MTA-156 COVER 6 PIN
33	0558003282M	1	PLATE FRONT VARIANT ARISTODRIVE4-30
34	23600982	1	SPR .88X.65D .88LD.HX300R
38	0558003284M	1	PLATE VARIANT REAR ARISTODRIVE4-30
43	0558003289	1	CONNECTOR 22 AWG 4 PIN
66	0558003290	3	CONNECTOR 20 AWG 4 PIN
67	2062161	1	CKT BREAKER 5A, 32VDC/250VAC
69	99512203	4	SPACER 0.261DX0.50DX0.13L PLST
70	0558003291	3	MTA-156 COVER 4 PIN
71	0558003292	3	CLAMP CABLE .191D STL

ITEM NO.	PART OR CODE NO.	QTY.	DESCRIPTION
72	045854400I	5	NUT, INSULATING MMI
73	0458659003	I	PANEL SIDE MECHANISM DD4-30
74	0458659004	I	PANEL SIDE MECHANISM DD4-30
75	045866500I	2	HINGE DOOR
76	045874800I	I	BUSHING INSULATING
77	0458748002	I	WASHER INSULATING
78	045877000I	2	label ESAB
79	045900088I	I	DRIVESTAND AY 30MM
80	0558002017	4	SPACER 0.341DX0.75DX0.38L NYL
81	0558003293	3	CORE FERRITE 17/9.5/29 3S4
82	0558003295	3	HOOD CONNECTOR 9PIN SUB-D 90DEG
83	0558003296	3	SCREW RETAINING SUB-D
84	0558002043	I	CONNECTOR 24 AWG 3 PIN
85	0558002044	I	MTA-156 COVER 3 PIN
86	0558002045	I	CONNECTOR 24 AWG 4 PIN
87	0558002046	2	MTA-156 COVER 4 PIN
89	0153043002	4	INSULATOR DRIVE STAND
90	0156602002	I	REAR PANEL INLET GUIDE DD4-30
91	0558002005	I	D-SHAFT WIRE FEEDER DD4
92	0558002009	I	VALVE ASSY B/I-G*F BKHD 42VAC
93	0558003320	I	WASHER D-TYPE
94	0558002048	6	STUD MOUNT
95	0458535886	I	MMI ASSY MA6
96	0558002000M	I	SUPPORT SPOOL AND SWIVEL
97	055800200IM	I	BASE DURADRIVE4-30
98	0558002002M	I	BASE CABINET DURADRIVE 4
99	0558002003M	I	TOP CABINET DURADRIVE4
100	0558002004M	I	WALL PCB DURA DRIVE4
101	0486384894	I	PC BOARD ASSY, W/F CONTROL, CANBUS
102	055800201IM	I	BRACE SPOOL SUPPORT
105	0558002016M	I	PLATE BLANK 4IN/ OPTION
109	182W64	I	LOCK TWIST MIDGET
118	954506	I	LABEL ISO-9001
119	2062336	I	PLUG TWIST LOCK
121	954425	I	LABEL LR30071 CSA
124	182W37	I	TERM END CAP

Items marked with * are: Screw, .375-16 x 1.00" Lg., RH and Washer, .375" Flat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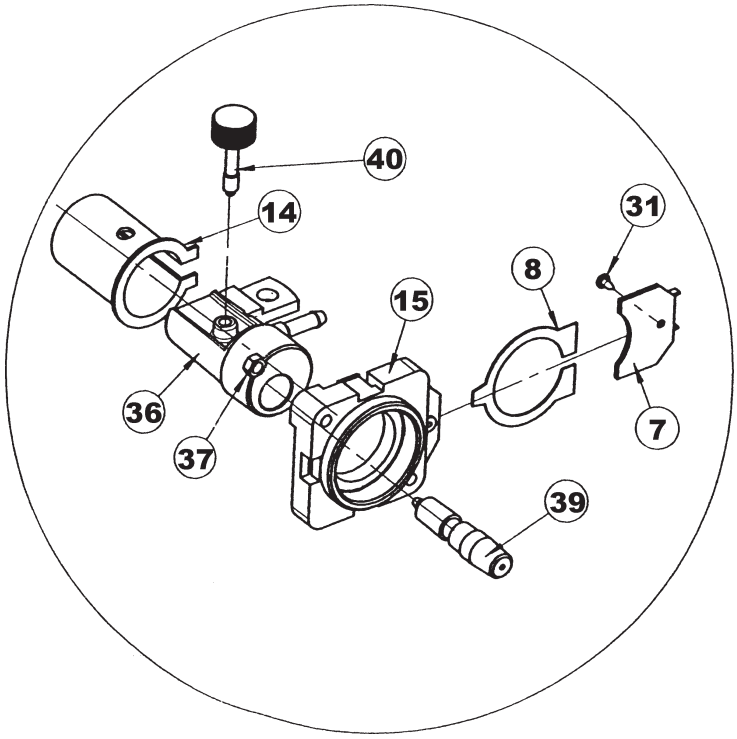
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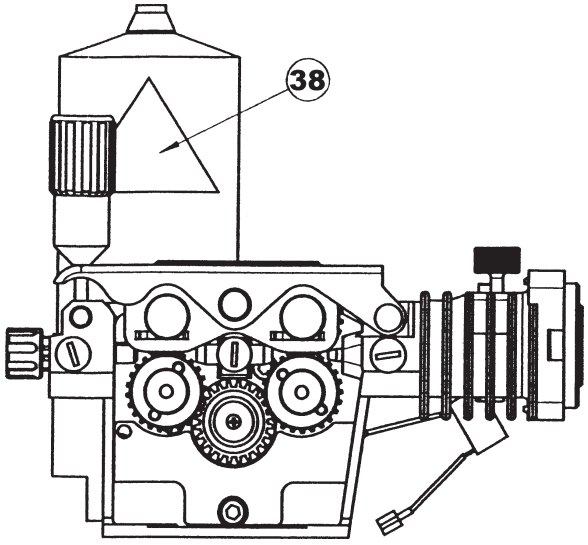
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ITEM NO.	QTY. REQ.	PART NO.	DESCRIPTION
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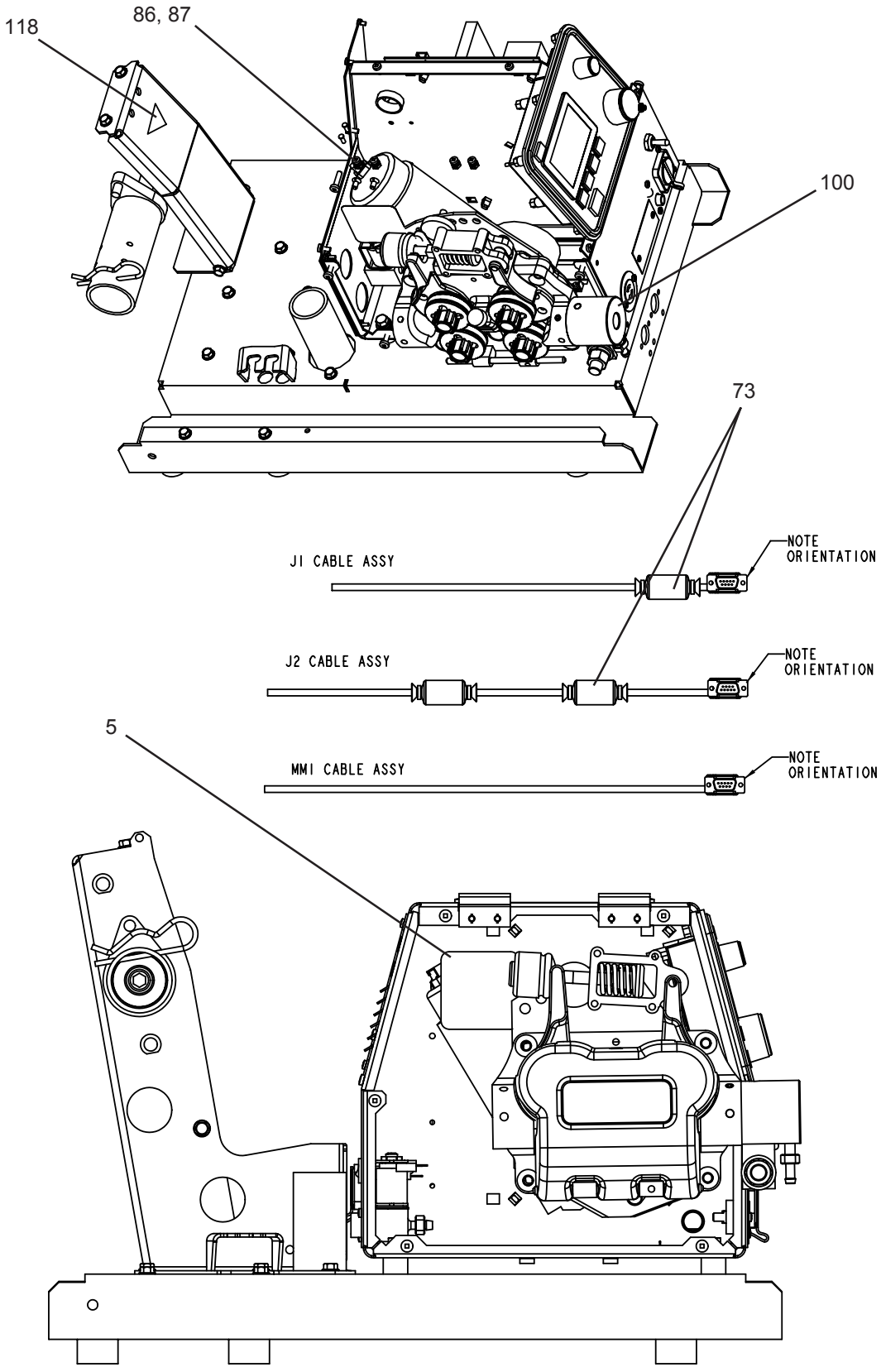
2	1	0459001880	PRESSURE ARM COMPLETE
3	1	0458997001	SHAFT
4	1	0458993001	TORSION SPRING
5	2	0458999001	SHAFT
6	1	0459055001	PIN BOLT
7	1	0481004880	PC BOARD
8	1	0455079001	MAGNET YOKE
9	2	0458722001	AXLE FEED ROLL
10	1	0455049001	INLET NOZZLE
11	1	34612 34613	INTERMEDIATE NOZZLE, .023” - .062” INTERMEDIATE NOZZLE, .062” - .093”
14	1	0455045001	INSULATING SLEEVE
15	1	0455047001	FRONT FLANGE
18	1	0455048001	INSULATING TUBE
19	1	0455077002	DRIVE UNIT
20	4	0459052003	FEED / PRESS.ROLLER
21	4	23612386	GEAR ADAPTER
22	1	34610	MOTOR GEAR
23	3	0192238368	SCREW MC6S
24	1	0469838001	COVER
25	1	0212601107	NUT, 8.8 M6
26	1	0368749881	PRESSURE DEVICE
27	3	952927	SCREW FOR NOZZLE
28	2	0458721001	LOCKING NUT
29	1	0192238378	SCREW, MC6S
30	2	0215100013	WASHER, D12 / 6.4 x 1.5
31	1	0212110704	SCREW, RXS
32	1	0467911880	CAPACITOR (LAN/LAR)
33	1	0191548009	FLAT PIN 6, 3 x 0, 8 M6
34	1	34609	SCREW, MRX STEEL 4.8
35	1	34608	RIVET WASHER
36	1	0455044002	CURRENT CONNECTION
37	2	0212601106	NUT, M6M 5
38	1	0443514001	WARNING SIGN
39	1	0458690880	OUTLET NOZZLE 1.5
40	1	0458687001	SCREW WITH KNOB
41	1	0215702708	LOCKING WASHER D6
42	1	0212106282	SCREW, IN6 STAL 12.9
43	2	0192238366	SCREW, MC6S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J2 CABLE ASSY
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MM1 CABLE ASSY
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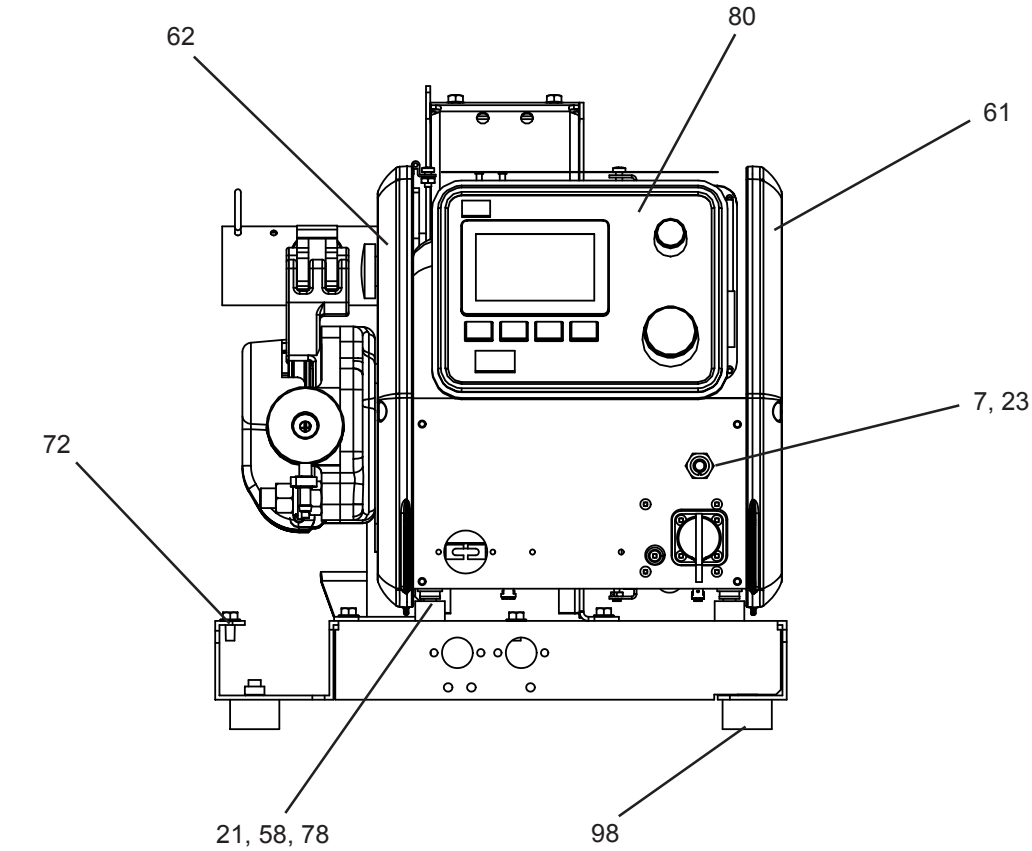
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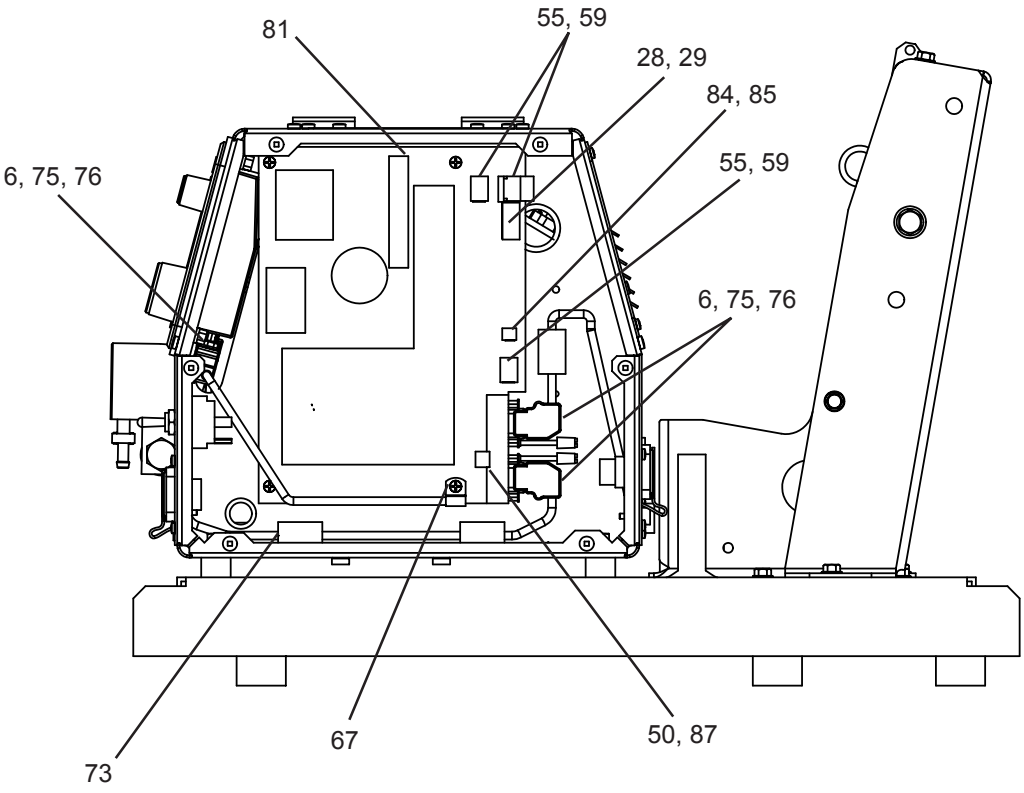
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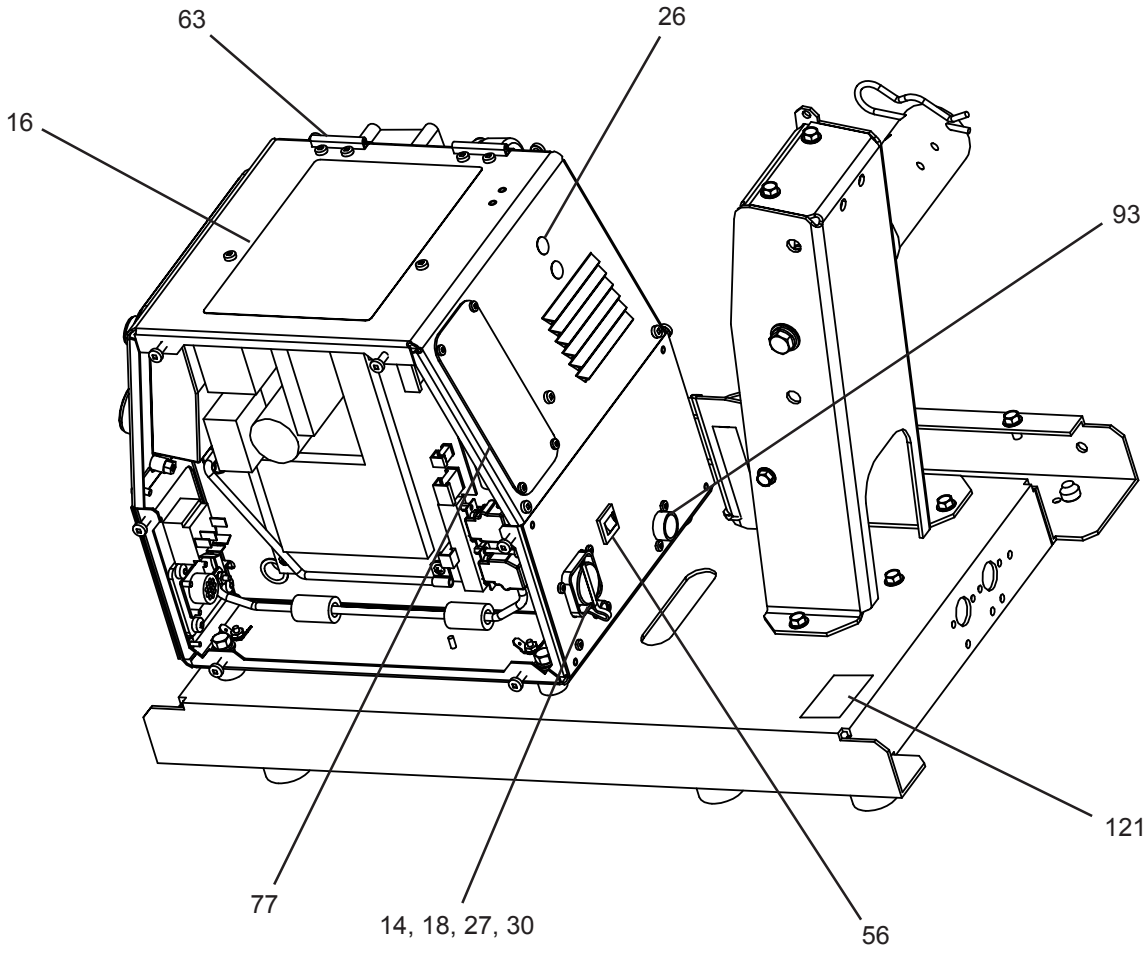
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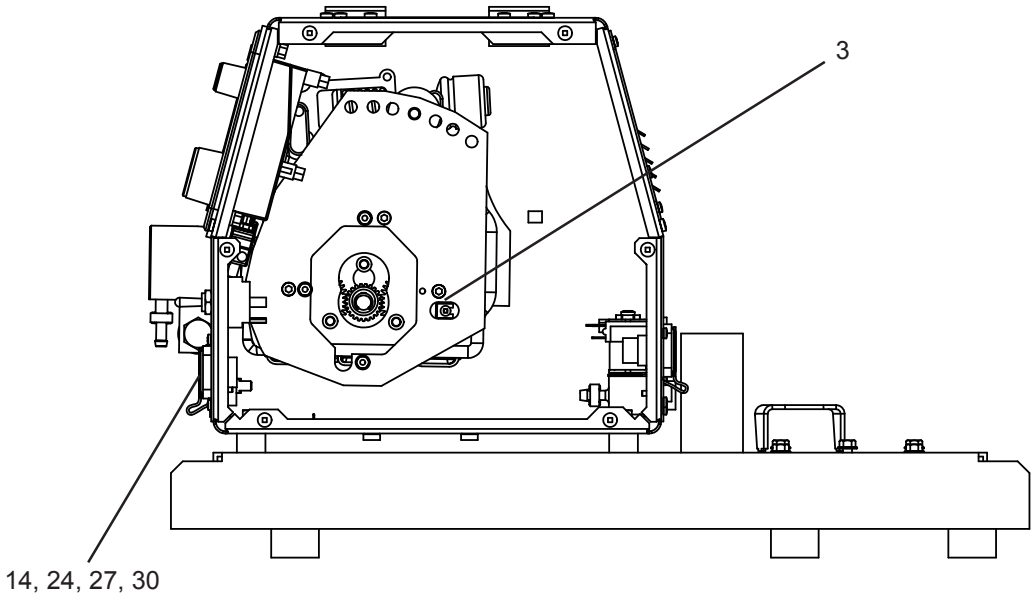
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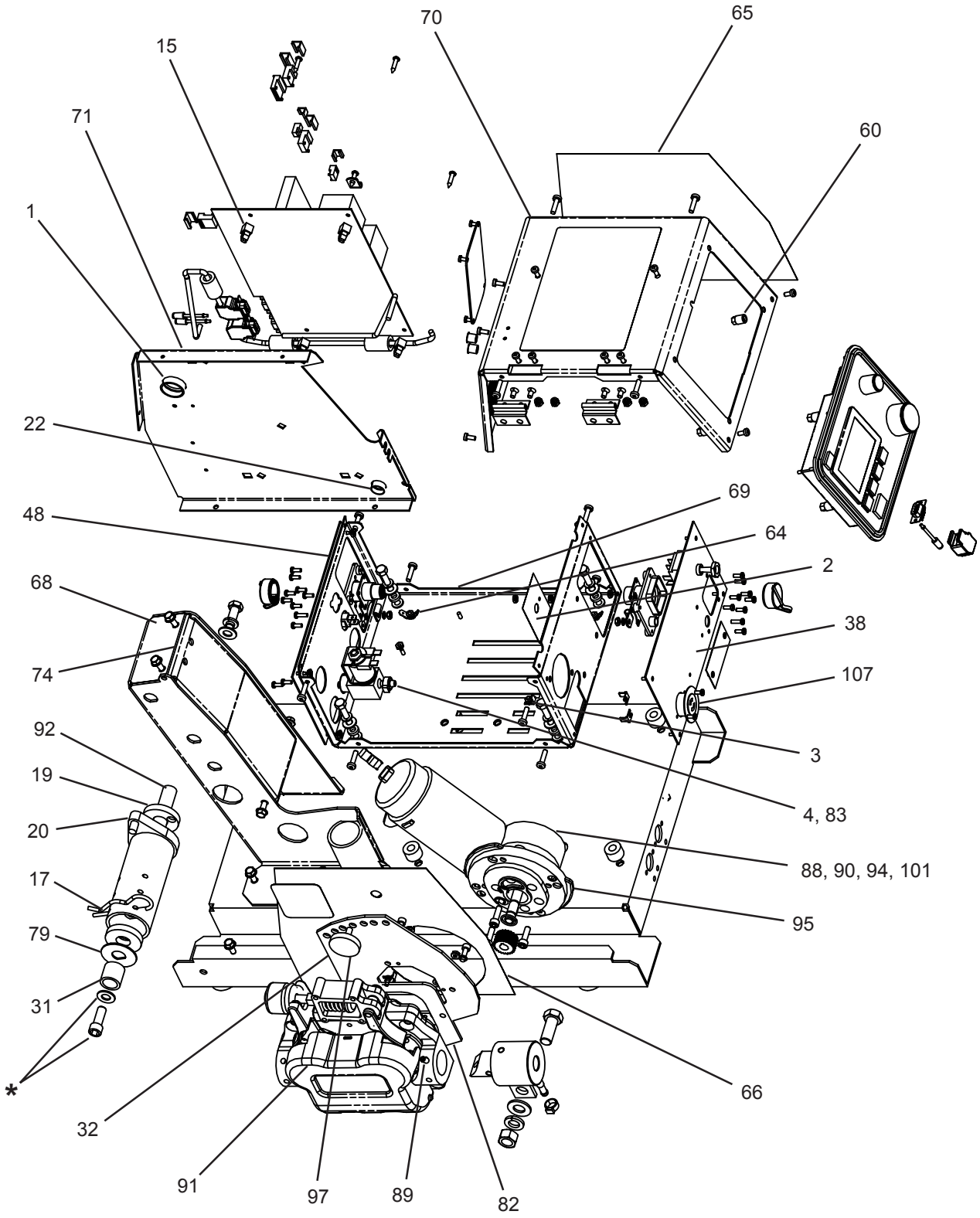
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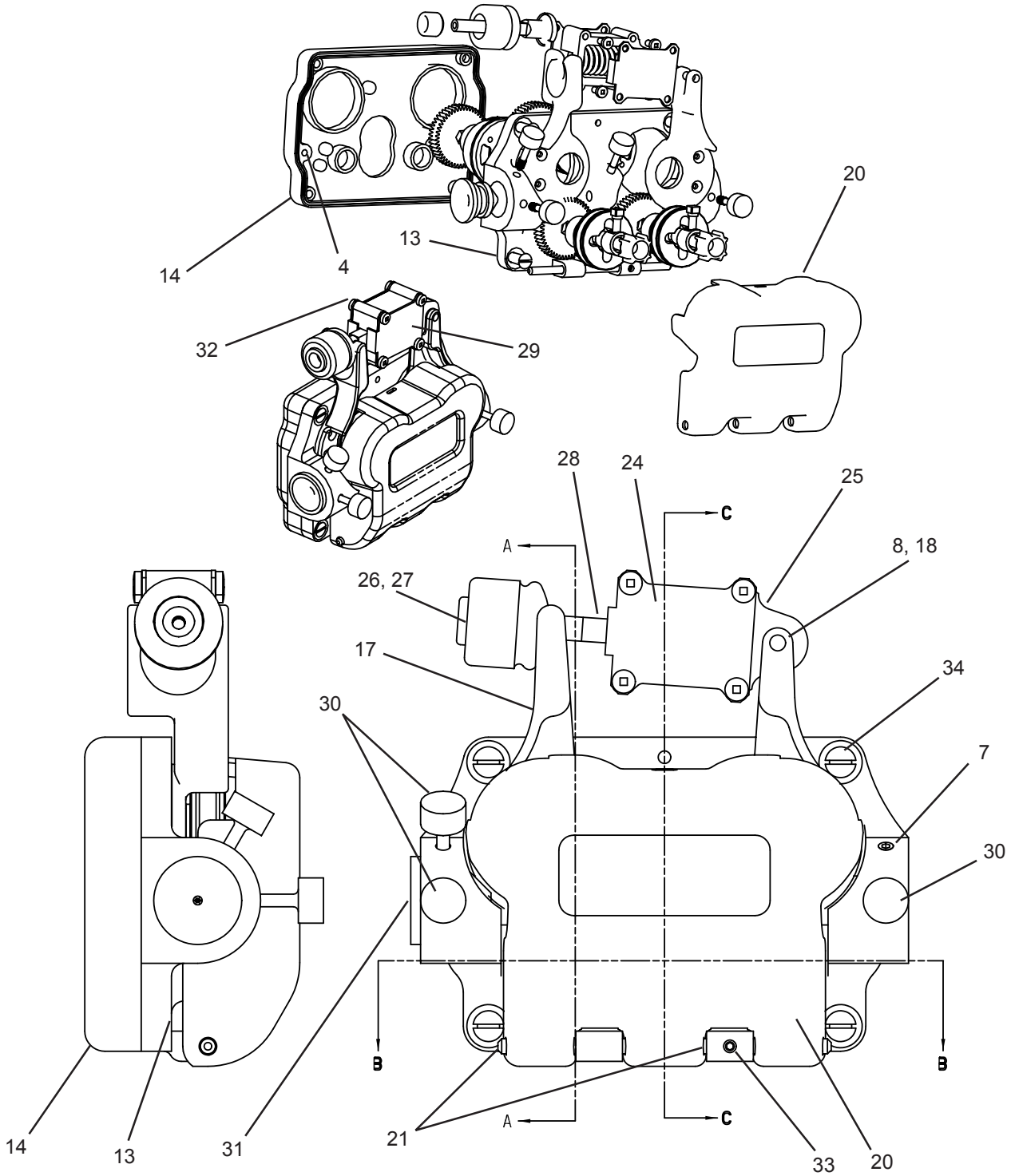
ITEM NO.	PART OR CODE NO.	QTY.	DESCRIPTION
1	639533	1	BUSHING SNAP .88 ID 1.09 MH .45L
2	676876	1	INSULATOR NOMEX
3	951889	4	ADAPTOR TAB PUSH ON 90 DEG
4	952860	2	CLAMP 1-EAR W/INSERT 12.8 GER
5	954698	1	LABEL WARNING GEAR PINCH
6	2213451	3	CONN D-SUB 9 PIN
7	672508	1	SWITCH TOGGLE 3PDT 2 POS 15A 125V
14	0366285001	2	PROTECTION CAP
15	2062195	4	FASTENER EXPANSION
16	2091514	1	LABEL WARNING WELD & CUT
17	634347	1	CLIP HITCH .16DX3.25L .751D CD
18	0368543003	1	CONN BOX RECPT BURNDY 12PIN
19	948255	2	PAD BRAKING
20	948258	1	SPINDLE MOLDED
21	950302	4	WASHER SHLDR
22	950823	1	BUSHING SNAP
23	951474	1	SWITCH SEAL BLACK
24	0368544003	1	CONN BOX RECPT 12SOCKET
26	13730802	2	PLUG HOLE .38 DIA.
27	0457799001	2	PLATE SCREEN
28	13735311	1	CONNECTOR 20 AWG 6 PIN
29	13735312	1	MTA-156 COVER 6 PIN
30	0457800001	2	INSULATION CAN CONNECTOR
31	23600982	1	SPR .88X.65D .88LD.HX300R
32	0558003262	1	PLATE DRIVESTAND SWIVEL DD4-48
38	0558003283M	1	PLATE VARIANT FRONT ARISTODRIVE4-48HD
48	0558003285M	1	PLATE VARIANT REAR ARISTODRIVE4-48HD
50	0558003289	1	CONNECTOR 22 AWG 4 PIN
55	0558003290	3	CONNECTOR 20 AWG 4 PIN
56	2062161	1	CKT BREAKER 5A, 32VDC/250VAC
58	99512203	4	SPACER 0.261DX0.50DX0.13L PLST
59	0558003291	3	MTA-156 COVER 4 PIN
60	0458544001	5	NUT, INSULATING MMI
61	0458659004	1	PANEL SIDE MECHANISM DD4-30
62	0458659007	1	PANEL SIDE DRIVESTAND DD4-48MM
63	0458665001	2	HINGE DOOR
64	634220	2	TAB
65	0458770001	1	label ESAB
66	0458770002	1	label ESAB

ITEM NO.	PART OR CODE NO.	QTY.	DESCRIPTION
67	0558003292	3	CLAMP CABLE .191D STL
68	0558002000M	1	SUPPORT SPOOL AND SWIVEL
69	0558002002M	1	BASE CABINET DURADRIVE 4
70	0558002003M	1	TOP CABINET DURADRIVE4
71	0558002004M	1	WALL PCB DURA DRIVE4
72	0558002007M	1	BASE DURA DRIVE4-48HD
73	0558003293	3	CORE FERRITE 17/9.5/29 3S4
74	055800201IM	1	BRACE SPOOL SUPPORT
75	0558003295	3	HOOD CONNECTOR 9PIN SUB-D 90DEG
76	0558003296	3	SCREW RETAINING SUB-D
77	0558002016M	1	PLATE BLANK 4IN/ OPTION
78	055800217	4	SPACER 0.341DX0.75DX0.38L NYL
79	0558003320	1	WASHER D-TYPE
80	0458535886	1	MMI ASSY MA6
81	0486384894	1	PC BOARD ASSY, W/F CONTROL, CANBUS
82	055800326IM	1	PLATE MOUNTING DD4-48
83	0558002038	1	HOSE GAS DURADRIVE4-48HD
84	0558002043	1	CONNECTOR 24 AWG 3 PIN
85	0558002044	1	MTA-156 COVER 3 PIN
86	0558002045	1	CONNECTOR 24 AWG 4 PIN
87	0558002046	2	MTA-156 COVER 4 PIN
88	0558002856	1	DRIVE GEAR 23MM
89	06S24012	1	SCREW SET M6 - 1.0 X 12
90	0558002990	2	CLIP DC RET RING .390DX.341D
91	0558001999	1	DRIVE STAND AY 48MM
92	0558002005	1	D-SHAFT WIRE FEEDER DD4
93	0558002009	1	VALVE ASSY B/1-G*F BKHD 42VAC
94	638797	1	O-RING .631DX.82X.070W
95	0558002039	1	PLATE SWIVEL MTG. DD4-48MM
97	0558002047	1	KNOB KNURLED .250-20 UNC-2A
98	0558002048	6	STUD MOUNT
100	055800221I	1	OUTLET ADAPTOR TWECO #4
101	0558002855	1	GEAR MOTOR DD4
104	05S12016	3	SCR RND HD M05-.08 X 16
107	182W64	1	LOCK TWIST MIDGET
118	954506	1	LABEL ISO-9001
119	2062336	1	PLUG TWIST LOCK
121	954425	1	LABEL LR 300071 CSA

Items marked with * are: Screw, .375-16 x 1.00" Lg., RH and Washer, .375" Flat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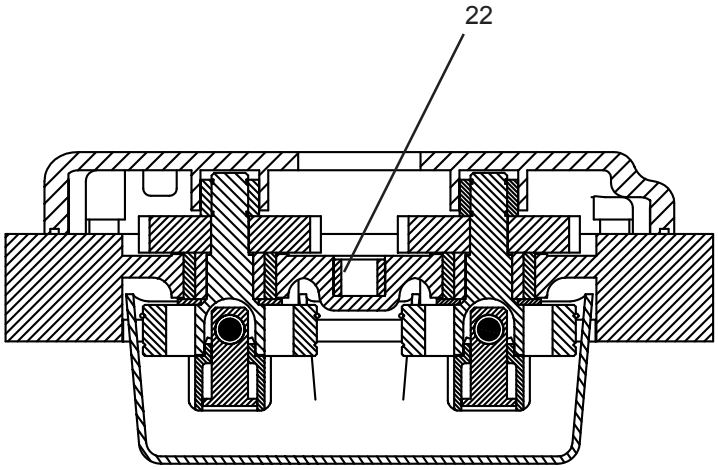
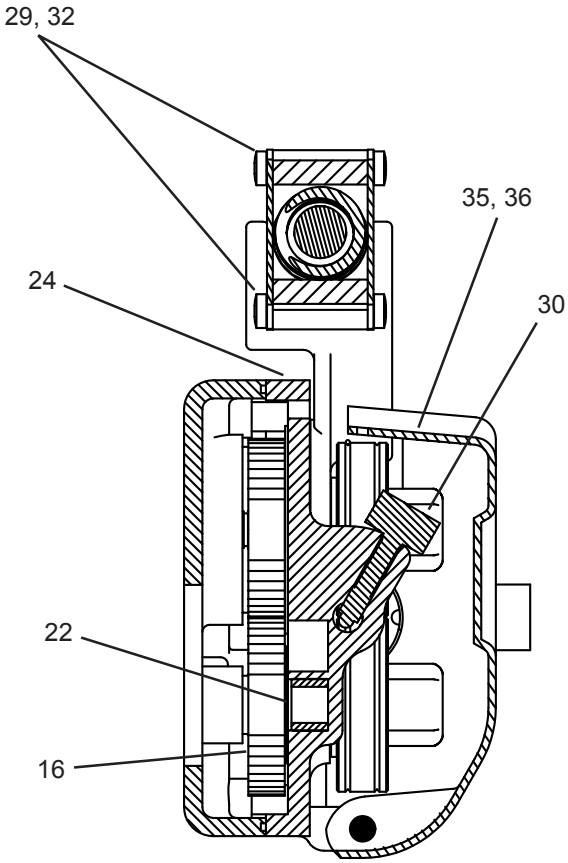
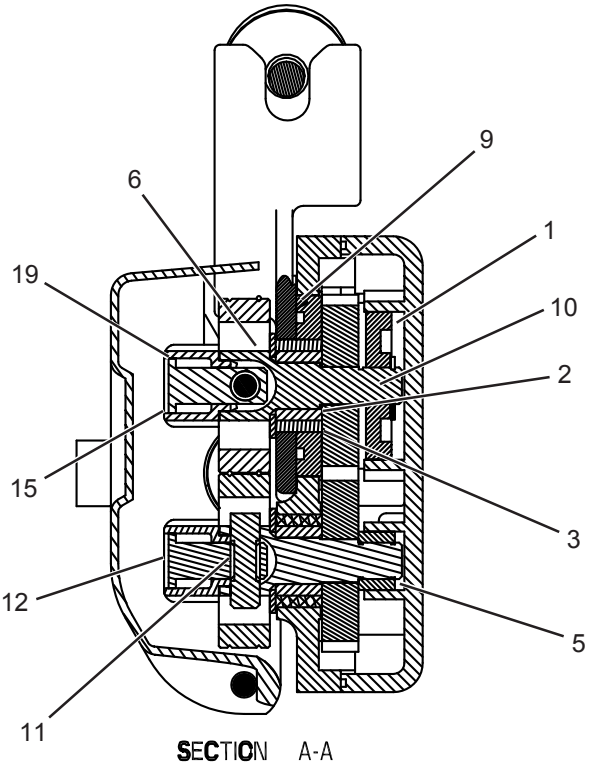


SECTION B-B



SECTION C-C



SECTION A-A

ITEM NO.	PART OR CODE NO.	QTY.	DESCRIPTION
1	0558001973	4	E-RING 10MM
2	0558001974	4	RACE BRG 0.751D 1.00OD 0.50L
3	0558001975	4	BEARING 0.75B 1.00OD .500L
4	REF.	2	DOWEL PIN 5MM DIA.
5	0558001977	2	BSHG NYLON 10MM ID 16MM OD 7MM L
6	0558001978	4	THRUST WASHER 1.125
7	06S26010	1	SCR 13017 STLZPC M6 1.0 X 10
8	0558001980	1	PADDLE PRESSURE RIGHT
9	0558001981	2	BEARING ECCENTRIC
10	0558001982	4	SHAFT FEED ROLL
11	0558001983	4	PIN FEED ROLL RETAINER
12	0558001984	4	RETAINER FEED ROLL
13	0558001986	1	PLATE FEED OUTER
14	0558001987	1	PLATE FEED INNER
15	0558001988	4	CLAMP PRESSURE
16	0558001989	4	GEAR SPUR
17	0558001990	1	PADDLE PRESSURE LEFT
18	0558001991	1	PIN LOCATING
19	0558001992	4	SPR 0.48 X 0.41D 0.75L 0.276H #10R
20	0558001994	1	GUARD FEEDROLL
21	0558001996	1	PIN HINGE
22	0558003061	1	BUSHING 10MM IDX14MMOD X 10LG
23	0558002141	1	O-RING
24	0558003689	1	PRESSURE SPRING DD4-48
25	0558002143	1	PRESSURE CLAMP BODY
26	0558002144	1	PRESSURE KNOB
27	0558002145	1	PRESSURE GAGE
28	0558002146	1	PRESSURE CLAMP SHAFT
29	0558002147	2	PLATE COVER
30	0458687001	4	LOCATING WHEEL
31	0558002347	1	INLET GUIDE
32	61325910	8	SCR 24006 STLZPC 0.190-32 X 0.38
33	61330907	1	SCR 13011 STLZPC 0.190-32 X 0.19
34	08S13020	4	M8X20 FLAT SOCKET HD C/S
35	05S04020	1	SCR 12046 STLZPC M05-0.80 X 20
36	05N00080	1	NUT 30001 STLZPC M5-0.80

NOTES

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NOTES

Revision History

1. **03 / 2003 revision: Updated entire replacement parts section per latest SmarTeam drawing informa tion.**

2. **08 / 2003 revision: Removed ".023" and ".030" V-Groove wire sizes data from Table 2-2.**

3. **10 / 2003 revision-B: Updated Table 4-1 (page 25) AristoDrive Troubleshooting Chart per Joe Devito mark-up.**

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